ENERGY AND WATER DEVELOPMENT APPROPRIATIONS FOR FISCAL YEAR 1982

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS UNITED STATES SENATE

NINETY-SEVENTH CONGRESS

FIRST SESSION

ON

H.R. 4144

AN ACT MAKING APPROPRIATIONS FOR ENERGY AND WATER DEVELOPMENT FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 1982, AND FOR OTHER PURPOSES

PART 3A—(Pages 2309-2613)

NONDEPARTMENTAL WITNESSES

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[CLERK'S NOTE.—Printing needs necessitated that part 3A be printed as a separate volume. The witness and subject indexes appearing at the close of this part incorporate parts 3, 3A, and 4.]

ENERGY AND WATER DEVELOPMENT APPROPRIATIONS FOR FISCAL YEAR 1982

THURSDAY, MARCH 26, 1981

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10:05 a.m. in room 1318, Everett McKinley Dirksen Senate Office Building, Hon. Walter Huddleston presiding.

Present: Senators Cochran and Huddleston.

NONDEPARTMENTAL WITNESSES

SUBCOMMITTEE PROCEDURE

Senator HUDDLESTON. The subcommittee will come to order.

In the absence of the chairman of the subcommittee, Senator Hatfield, I have been asked as a member of the subcommittee to preside over today's session. Senator Hatfield expresses his regret that he cannot be here this morning.

We have a large number of witnesses that wish to be heard. Therefore, in accordance with our notification to each witness, it will take some self-restraint on the part of everyone to hold their oral testimony to a minimum in order that all of you who have requested an opportunity to testify can be heard. We have some additional scheduling difficulties that have come up which is going to make our time constraints even stricter.

So in keeping with the subcommittee's wishes, I ask that the detailed prepared statements each of you has worked out very carefully be submitted for the record, where they will be carefully reviewed. That is the record the subcommittee will study in determining its estimates and recommendations for the upcoming year. Also, in this way we will have a carefully detailed record so everyone who is not present will be able to arrive at an independent judgment. Then if each witness will highlight or summarize the points of his testimony it will be most helpful to us. We will proceed on that basis.

Of course, we are very delighted to have the senior Senator from the State of Florida with us this morning, Senator Chiles. You may proceed.

FLORIDA WATER RESOURCE PROJECTS

STATEMENT OF HON. LAWTON CHILES, U.S. SENATOR FROM FLORIDA

Senator CHILES. Thank you very much, Mr. Chairman. I want to thank you for the opportunity to appear today before your subcommittee on behalf of the funding of the Florida public works projects for fiscal year 1982.

I appreciate very much the courtesy you have extended to me and to the officials of the Florida Department of Environmental Regulation, the agency charged with the administration, supervision, development, and conservation of the natural resources of the State, in permitting us to come before you today.

As in prior years, the department of environmental regulation is presenting a unified request for the fiscal 1982 funding. Our secretary of the department of environmental regulation, Victoria Tschinkel, will present the department's recommendations. As she will discuss these projects in her testimony, I will not take the time of the subcommittee to go into each project in any detail. However, I would like to call particular attention to several projects which I feel deserve the special attention of the subcommittee.

The U.S. Army Corps of Engineers is presently in the process of looking at the availability and usage of the freshwater resources in a five-county area in west-central Florida. The area, which includes Levy, Marion, Citrus, Sumter, and Hernando Counties, is experiencing rapidly increasing population growth which is placing a heavy burden on available water resources.

The purpose of this study is to determine present water needs and to assure adequate water for future use and arrange alternative sources for areas of potential shortage. I have had a continued interest in this particular study and fully support the $150,000 requested by the State and recommended by the administration for continuation of this effort.

GOLDEN GATES ESTATES STUDY

Another study effort authorized by Congress involves Golden Gate Estates and adjacent areas of Collier County and focuses on developing a plan to mitigate existing water resource and environmental problems of this area. This is a high priority with the State department of environmental regulation. Last year, $150,000 was provided for this fiscal year, and the Corps has expressed its capability for this fiscal year to be about $350,000. I hope the subcommittee will take a close look at this study. The State has stressed the importance of proceeding with this effort in order to mitigate continuing and severe disruptions to the water and land resources of not only the Golden Gate Estates area, but the areas around it—the Fahkahatchee Strand, prime agricultural areas north of Golden Gate Estates, and estuarine areas of southwest Florida.

SUWANNEE RIVER STUDY

Mr. Chairman, last year at my request the Senate Environment and Public Works Committee adopted a resolution authorizing the Corps to begin a study of the Suwannee River basin. There is considerable State and local support for addressing the problems associated with unrestricted growth in this area of my State. There efforts, however, are dependent on accurate, 1-foot contour maps and predictive models of the floodway and floodplain. In order to obtain this mapping, I assisted the State and local planning agencies and other interested individuals in obtaining the authorization for the Suwannee River study. The Corps and the Suwannee River Water Management District are presently working together to clarify the mapping needs of the local interest. I will continue to support these efforts, and I am pleased the President has included $50,000 in his fiscal year 1982 budget request for initiating this study.

Another important resolution adopted by the Senate Environment and Public Works Committee last year authorized a review of Federal projects and their impact on Biscayne Bay in Florida. Dade County residents and public officials are to be commended for activities relating to the restoration and enhancement of the water quality and marine environment of the bay. This study will supplement local efforts and I hope the subcommittee can find a way to accommodate the State's request for initial funding for this study.

Again, I want to thank you, Mr. Chairman, for the opportunity to appear before you today and to present and bring our Florida people who will be presenting the uniform Florida request.

Senator HUDDLESTON. Thank you, Senator. I know that you have other places to go, and if you will protect my interests at the Democratic caucus, I will try to protect yours here.

Senator CHILES. Thank you very much. That sounds like something we ought to be able to work out.

STATEMENT OF VICTORIA TSCHINKEL, SECRETARY, FLORIDA STATE DEPARTMENT OF ENVIRONMENTAL REGULATION

ACCOMPANIED BY AL BISHOP, CHIEF, FLORIDA BUREAU OF WATER RESOURCES

Senator HUDDLESTON. Ms. Tschinkel.

Ms. TSCHINKEL. I would like to introduce Al Bishop, who is chief of our bureau of water resources for the State of Florida.

First, I would like to thank very much the subcommittee, the full committee, and the Congress for providing Florida with $70 million for its public works program. We very much appreciate that, and consider we have been treated well last year and in the Reagan budget this year.

We also would like to thank Senator Chiles, even though he is not here right at the moment, for the help he has given us on a number of important environmental and restoration projects.

I know you must be aware of recent news articles on the threat to Florida's resources, particularly water resources. It is mounting daily and causing a great alarm. A number of these projects are directed to alleviate those problems.

We really request fund in four basic areas in Florida and I would like to highlight those.

FLOOD CONTROL AND WATER SUPPLY

First of all, the area of flood control and water supply. We have two great projects in Florida that have been started a long, long time ago and are continuing. Hopefully, these projects will be completed in the next several years. There are several projects in the central and south Florida area which will continue to improve the delivery of good quality water down to the most populous area of the State and which will alleviate flood control problems that have occurred there over the years. Similarly, the Four Rivers basin project is a complex project which will go to restoring aquifer levels in the southwest area of Florida, for the St. Petersburg and Tampa areas, and will alleviate flood control problems and restore environmental quality in those areas.

NAVIGATION PROJECTS

The second category is in ports and navigation. We are very much oriented toward our ports in Florida. To give you several examples, we are trying to finish up the Tampa Port deepening project and the Everglades Port is in its final stages of deepening, hopefully, to be completed. Tampa serves the State's phosphate industry and other ports are terminals as well.

In addition, as part of the Tampa Port project this year, we have come in with a late request for a study realinement adjacent to the Sunshine Skyway. You probably remember that 35 people died last year as a result of the channel alinement, or at least in part of the channel alinement there. The Corps has agreed with us we ought to take another look at that. At the same time, Florida is going to be spending a great deal of funds to build a second bridge to replace the bridge that collapsed. In working together, we hope we can resolve that difficulty.

BEACH RESTORATION PROGRAM

The next area is the area of beach restoration. At the present time, we have a lot of projects we can do very well in Florida. Two examples of that, one is the beach in Dade County. We are in the fifth phase of that restoration. Those of you who have flown over Miami Beach can see the great result of that beach. There is going to be hurricane control, recreation, and commercial assistance for that area of the State. The Pinellas area we are seeking funds for Sunset Beach restoration.

ENVIRONMENTAL QUALITY PROGRAM

Finally, some projects that come near and dear to the secretary of environmental regulation in Florida are in the area of restoration and enhancement of our environmental quality in the State. I think Senator Chiles spoke on the projects. All of these projects will have flood control and water storage capabilities. They also are very important in recharging of our aquifers. In Florida, we take 90 percent of our water from aquifers. We have terrible saltwater intrusion problems along the southwest coast of the State. Surprisingly enough, we are starting to have problems in the northwest part of the State and Daytona Beach. These environmentally oriented projects also have recreation and fish and wildlife benefits.

Just to highlight a couple of them you are going to be hearing about, along the upper St. Johns River, for example, the entire marshlands have been diked and drained for agricultural purposes. The Corps is now involved in a study on the possible restoration of those marshes. We are also looking at possible restoration along the Kissimmee River. I think you have seen pictures of the Kissimmee River. Senator Chiles mentioned the Suwannee, Six Mile Cyprus and Golden Gate studies. Because of the poor development at Golden Gate, the water table at high water has dropped 8 feet. It is like having an open faucet aquifer draining into the gulf.

STATES FUNDING SUPPORT

I have two more points. The State is committed to spending a great deal of its own money on these projects. We are not asking you to do things we wouldn't do ourselves. The Governor has developed a resource management task force to study problems of the Suwannee River down to Charlotte Harbor to decide what the most cost-efficient methods are involving State expenditures and Federal expenditures. We are committing $7 million of general revenue this year and $6 million next year to beach restoration in the State. The State is putting $2 million into the restoration of Biscayne Bay. The amount we are asking for on the Federal level is relatively small, as you can see, but it would take care of the Federal responsibility we feel in that area.

Finally, the Governor is requesting $310 million to be raised over a 10-year period for acquisition of wetland areas and other areas, which will go hand in hand with restoration. That brings me to my very last point. On the old authorization of projects we have in Florida, the way the funding share was arranged said land acquisition would be totally State responsibility. Florida has learned a hard lesson that the best type of flood control and water resource projects, if you can start from scratch, are the ones that most closely follow the natural way of doing things. I think you will find a number of these Corps restudies on the St. Johns River and Kissimmee River are going to be better than structural alternatives. At that time we would request that the Federal share include, in partnership with the State, the acquisition of land as an alternative to structural means of controlling flooding problems and providing water resources to the State.

Thank you.

Senator HUDDLESTON. Thank you. We have your full statement and report on the public works appropriations for 1982, which will be part of the record.

Ms. TSCHINKEL. Thank you very much for allowing us to appear.

[The statement follows:]

STATEMENT OF VICKI TSCHINKEL, SECRETARY, FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

Mr. Chairman and Members of the Subcommittee, I am Vicki Tschinkel, Secretary of Florida's Department of Environmental Regulation. It is my pleasure to represent the State of Florida here today and to present to you our program of Public Works for Water Resources Development in Fiscal Year 1982.

This unified program has the strong support of Governor Graham and the agencies of the State Resource Management Clearinghouse.

Our annual program of Federal Public Works projects is presented in booklet form and provides a summary of the State's request for appropriations for each of the construction projects and general investigation studies that make up the program. Summaries for each project include cost data, project descriptions, justifications for funds requested, and a location map. I have copies of the booklet here to submit for the record along with this Summary Statement.

Included in the Fiscal year 1982 program are 6 flood control, 12 navigation, and 6 beach erosion control projects, either construction or general investigation studies. Also included are 6 study projects in the area of environmental restoration and enhancement, as well as 2 new continuing authority study requests. The total request for Florida's Public Works Program is $87,997,000 and includes a request for continued funding of the aquatic weed control program in Florida.

In the category of flood control, the Central and Souhern Florida Flood Control project and the Four River Basins Project are, by far, our largest. Both projects incorporate works in the State's two largest population centers where adequate water resources must be developed to keep pace with the area's continued growth and expansion. Full funding at the level indicated is necessary to meet planned program needs.

The $13.7 million request for the Central and Southern Florida Flood Control project will provide relief from flooding caused by prior federal project construction in Hendry County on the southwest side of Lake Okeechobee. Funding requested will also permit work in the Nicodemus Slough area which will allow raising Lake Okeechobee to the 17.5 foot regulation schedule and thus reduce environmentally damaging and wasteful flood releases to the ocean through the Caloosahatchee and St. Lucie Canals and associated estuaries. In addition, these funds will allow continuation of construction associated with the removal of flow constrictions in the canals associated with L-18, L-19, L-24 and L-25. These actions in conjunction with other existing project components will provide supplemental water to augment supplies and prevent saltwater intrusion and will facilitate the delivery of water to Everglades National Park, in accordance with P.L. 91-282. A part of this overall request is funding to initiate the recommended alternatives(s) for the Upper St. Johns River Basin should the GDM and EIS documents be favorably reviewed. The St. Johns River Water management District is the local sponsor of this portion of the project and has been developing a range of alternatives to deal with the complex problems in this basin. These alternatives have stressed the importance of non-structural solutions to water management problems and are designed to include consideration of the value of wetlands and other environmentally sensitive areas. Benefits attributed to such an approach include enhanced water quality, recreation opportunities, fish and wildlife propagation and agricultural land protection. Re-establishment of seasonal flooding would greatly enhance the ability of the marsh systems to cleanse the river.

The $1.9 million requested for the Four River Basins project is needed to continue construction of the Lower Hillsborough Flood Detention Area and the Tampa By-Pass Canal which together will provide flood protection and augment water supplies for the Tampa metropolitan area. As a by-product, 16,000 acres of wetlands and other ecologically valuable lands will be preserved for multiple uses. Funds would also be utilized to continue recreation contracts in the Lower Hillsborough Flood Detention Area.

Several water management studies are included in Florida's request. General investigations for the Central and Southern Florida Water Supply, Loxahatchee Canal (C-18), and the Withlacoochee River Region will address problem areas where detailed planning is required to realize full water resource management benefits. The funds requested for the Suwannee River Basin Study will allow initiation of study efforts that will provide much needed information on which to base rational steps to preserve and protect one of Florida's most unique natural assets.

In the area of navigation, Florida has requested FY-82 construction funds for 4 major projects.

The 183 million dollar project for deepening Tampa Harbor to 43 feet is a major component of this program. With over 42 million tons of cargo moving through the facilities annually, this is Florida's largest port and handles more phosphate shipping than any other harbor in the world. Funds are also requested for deepening of Port Everglades Harbor to provide adequate depths for deep draft petroleum tankers utilizing the facilities there. The projects at Port Manatee and Ft. Pierce are also included in the State's program, although specific construction authorizations are pending in Congress. Funding would allow initiation of advanced engineering and design of the projects.

Continuing funding is also requested for navigation feasibility studies including Gulf Coast Passes, Jupiter Inlet, Palm Beach Harbor and the Big Bend and Alafia Channels in Tampa Bay. In addition, there are several requests for new studies, including Canaveral Harbor and Port Boca Grande. One other study, the Mexico Beach Inlets, requires reactivation. A special request is made for an investigation to evaluate realignment of the Tampa Harbor Channel seaward of the Sunshine Skyway Bridge. Thirty-five people were killed last year when a ship in a storm collided with the bridge, collapsing one of its two main spans.

Beach erosion is a serious problem in Florida. While Beaches are recognized as dynamic systems constantly undergoing change, natural erosion from littoral currents and destructive storms has been severely aggravated by encroachment on the shoreline by development and, ironically, by previous attempts to alter these erosional and depositional processes. Fortunately, Florida's program to establish standards and limitations for coastal construction is achieving beneficial results. However, the damage that has already been done must be corrected in order to provide protection from storm damages and to restore adequate recreational beaches for the millions of tourists who visit Florida each year.

Florida's request for FY-82 funds contains 4 major beach erosion control construction projects. These beaches are located at 2 locations in Dade County, at Panama City in Bay County, and in Pinellas County. The Pinellas County project was not included in the State's preliminary request for FY-82 funds due to scheduling difficulties identified by the Corps of Engineers. However, these difficulties have now been resolved, and preconstruction planning for the project is underway. We urge your support for all of these beach nourishment projects at the levels requested.

Our recommendation also includes 2 authorized beach erosion control studies. They are in Flagler County and Sarasota County. A supplemental project for Key West is being requested, although it does not appear in our booklet. Some environmental impact concerns regarding the Key West project have recently been resolved, and Governor Graham has expressed strong support for the project. A specific level of funding has not been developed by the Corps of Engineers at this time; however, we will forward our request to you as soon as we are able to evaluate their expressed capability.

Florida has always taken the lead in initiating programs contributing to enlightened management of natural resources. One of our major goals is to broaden the scope of Federal participation in water resources development projects to include the restoration and enhancement of water resources under severe environmental stress. Funds are requested to continue 3 previously funded efforts and to initiate 3 new studies in FY-82 which fall within the category of environmental restoration and enhancement.

For the Kissimmee River Valley, the Florida Legislature has requested that alternatives be examined for restoring this river which was channelized during the 1960's for flood control purposes. Wetland habitat destruction resulting from the channelization and increased development stimulated by drainage have had an adverse impact on the water quality and general ecological stability of Lake Okeechobee. That lake serves directly and indirectly as the major source of drinking water for millions of residents of South Florida. A study in Shark River Slough, located at the northern end of Everglades National Park, will determine the best methods for water releases to the Park to recreate historic sheet flow conditions necessary to protect and maintain the fragile ecological balance within Everglades National Park.

The Golden Gate Estates redevelopment study would explore the feasibility of redistributing water over an area which has been overdrained by improper land development. This will serve to restore marshlands, revitalize sports and commercial fisheries, and increase the area's depleted surface and groundwater supplies.

Funds for the study of the Six Mile Cypress Strand, Lee County, will be used to examine means of restoring and preserving this area so that it can act as a natural buffer between the Ft. Myers Urban Area and encroaching development. This proposal has been developed with full input by local citizens who have passed a referendum authorizing new taxes upon themselves in order to assist this restoration effort. Additional funds are requested for a study of Biscayne Bay in Dade County. This study would evaluate the cumulative impacts of previous Federal construction activities in and around the bay and suggest possible solutions. The study in the Little Econ River Valley, should it be authorized, would assist responsible management agencies in their attempts to restore floodplain function and develop appropriate flood control alternatives in this rapidly urbanizing watershed.

Though the Six Mile Cypress Strand and Biscayne Bay Studies are authorized, no funds were included for them in either President Carter's or President Reagan's budget. Similarly, no funding was included for the Golden Gate Estates Study, an ongoing study. We urge you to correct this situation.

I must comment on the importance of these environmental restoration and enhancement studies to Florida. They provide the opportunity to plan for correcting previously destructive practices that threaten water and related resources in a state that depends directly on maintaining high environmental quality. We are one of the fastest growing states and increasing demands will be placed on the very resources that bring many of the new residents and tourists to our state.

The final funding requests include 2 new studies for Corps continuing authority recreation projects in the Jacksonville and Kissimmee Areas and funds to continue the State's removal and control of aquatic plants.

Included in our program is an appendix which contains a resolution by Florida's Governor and Cabinet recommending deauthorization of the Cross Florida Barge Canal and Federal participation in restoring a portion of the already constructed works. The Florida Legislature will consider means of reimbursing affected property owners for certain rights-of-way previously purchased, should the Congress act to deauthorize this project.

In relation to projects associated with floodprone areas, it is becoming increasingly apparent in Florida that non-structural approaches to floodplain management, where feasible, offer many advantages. By this, I refer to floodplain zoning, acquisition of wetlands and floodplains, and other flood damage prevention measures. Non-structural floodplain management programs, in addition to preventing flood damage, serve to maintain environmental quality and conserve energy which would otherwise be required to construct and maintain public works.

In this light, we would like for Congress to give high priority to the non-structural funding capabilities of Section 73 (A) and (B) of Public Law 92-251, when considering projects related to flood protection. Currently, Corps of Engineers regulations provide for 80% matching Federal funds for both non-structural and structural alternatives for new projects in the planning phase but many authorizations for existing projects require the local sponsor to provide 100% of the land acquisition costs. These regulations also require that acquisition be limited to areas inundated by anticipated flood and do not normally include acquisitions to preserve upstream wetland or natural areas for retarding or reducing downstream flows. This creates a bias toward structural solutions by making such projects initially less expensive for the State and local sponsor than non-structural solutions requiring land acquisition and makes it difficult to re-design existing projects to more adequately consider non-structural alternatives. Greater participation by the Federal government in land acquisition and management programs in a cost sharing arrangement, similar to the present 80/20 formula for authorized structural projects, and consideration of environmental enhancement benefits of non-structural projects would help eliminate this bias.

Finally, we are aware of the current efforts to balance the federal budget and it is apparent that certain program areas will be cut back in order to accomplish this. President Reagan's budget has reduced funding for Florida by $1.68 million below that recommended in President Carter's budget. Much of that reduction was the elimination of the Pinellas County Beaches project. Pinellas County is Florida's most densely populated county. The seriously deteriorated condition of the county's beaches plus the high resident and tourist demand for high quality beach recreation justifies our request for this project.

It is important to point out that the program which the State is presenting today represents what we consider to be our basic needs. In order to be included in our final program, projects must undergo an extensive review process by interested State and local agencies within Florida. A list that began with some 50 potential projects last March has now been reduced by that review process to the 32 projects included in the program as presented today. We would urge you to bear this in mind as you consider areas to reduce spending. Should further clarification of the State's needs be necessary, please feel free to get in touch with us. Thank you.

STATE OF FLORIDA
FY-82 PUBLIC WORKS PROGRAM

Project	President's Budget	Corps Capability	State of Florida Request
FLOOD CONTROL			
Construction			
Central and Southern Florida	$13,700,000	$13,700,000	$13,700,000
Four River Basins	1,900,000	1,900,000	1,900,000
Studies			
Central and Southern Florida Water Supply	650,000	650,000	650,000
Central and Southern Florida, C-18	175,000	175,000	175,000
Suwannee River Basin	50,000	50,000	100,000
Withlacoochee River Region Water Supply	150,000	150,000	150,000
NAVIGATION			
Construction			
Ft. Pierce Harbor	0	0	100,000
Port Everglades	13,982,000	13,982,000	13,982,000
Port Manatee	0	0	300,000
Tampa Harbor	38,000,000	38,000,000	38,000,000
Studies			
Big Bend and Alafia River Channels	153,000	153,000	153,000
Canaveral Harbor	0	-	50,000
Gulf Coast Passes	0	150,000	150,000
Jupiter Inlet	0	30,000	30,000
Mexico Beach Inlets	0	0	50,000
Port Boca Grande	0	120,000	120,000
Port of Palm Beach	0	50,000	50,000
Tampa Harbor Channel Realignment	0	0	100,000
BEACH EROSION CONTROL			
Construction			
Dade County Beaches	9,300,000	9,300,000	9,300,000
Dade County - Haulover Beach Park North	0	0	150,000
Panama City Beaches	0	0	400,000
Pinellas County Beaches	1,000,000	1,000,000	1,000,000
Studies			
Flagler County	80,000	80,000	80,000
Sarasota County	126,000	126,000	126,000
ENVIRONMENTAL RESTORATION AND ENHANCEMENT			
Studies			
Biscayne Bay	0	100,000	100,000
Golden Gate Estates	0	453,000	453,000
Kissimmee River	377,000	377,000	377,000
Little Econ River Valley	0	0	50,000
Shark River Slough	146,000	146,000	146,000
Six Mile Cypress	0	50,000	50,000
CONTINUING AUTHORITY AND RECREATION			
Hugenot Memorial Park	0	0	50,000
Kissimmee Lakefront	0	0	50,000
AQUATIC WEED CONTROL PROGRAM			4,619,000
		TOTAL:	87,997,000

CENTRAL AND SOUTHERN FLORIDA FLOOD CONTROL
(Construction)

COST DATA:		
	Estimated Federal Cost	$649,000,000
	Estimated Non-Federal Cost	315,000,000
	Federal Funds Through FY-81	255,476,000
	President's Budget FY-82	13,700,000
	Corps Stated Capabilities FY-82	13,700,000
	State of Florida Request FY-82	13,700,000
	Benefit Cost Ratio: 5.3:1	

SPONSOR: South Florida Water Management District

PROJECT DESCRIPTION: The project encompasses an area of approximately 17,930 square miles which includes all or part of 16 counties in central and southern Florida. It embraces Lake Okeechobee, its regulatory outlets, a large portion of the Everglades, the Kissimmee River Basin, and the Lower East Coast of Florida. Included are a series of levees, canals, control structures, water conservation areas, and similar works designed to guard against flooding, to provide protection from hurricane damage, and to provide optimum conservation management and use of water resources. Authorized facilities include 39 pumping stations, 180 control and diversion structures, 850 miles of levees, 870 miles of canals, 25 navigation locks, and 58 railroad relocations. Actual construction began in January, 1950, and over 600 miles of levees have been completed.

The requested FY-82 funding would be used for: (1) raising the level of Lake Okeechobee (Nicodemus Slough GDM); (2) removal of flow constrictions in the canals associated with L-18, L-19, L-24, and L-25 to enhance flow from Lake Okeechobee to the Miami and North New River Canals; (3) Hendry County flood protection (C-139, S-239, and S-243); (4) and miscellaneous construction - replacing antiquated facilities with S-155 (an automatic control structure), protecting an existing railroad bridge (B-127), and reducing saltwater intrusion with the Buttonwood Structure (S-341). In addition, $40,000 of the funds requested would be used to initiate construction on the Upper St. Johns alternative as approved by the Governing Board of the St. Johns River Water Management District, assuming a favorable review of the project's General Design Memorandum and Environmental Impact Statement.

PROJECT JUSTIFICATION: This project is vital to the protection of the highly urbanized Lower East Coast from salt water intrustion, flooding, and hurricane damage. The project also affords protection from floods to the productive agricultural areas south of Lake Okeechobee. Furthermore, the project provides for increased storage and conservation of water for improved distribution throughout the project area during dry seasons. By using protective works to augment optimum management, these functions can be accomplished and a source of fresh water can be provided to the Everglades National Park. In addition, provisions are made for small-craft recreational facilities within the project area.

FOUR RIVER BASINS
(Construction)

COST DATA:		
	Estimated Federal Cost	$166,000,000
	Estimated Non-Federal Cost	101,500,000
	Federal Funds Through FY-81	61,736,000
	President's Budget FY-82	1,900,000
	Corps Stated Capabilities FY-82	1,900,000
	State of Florida Request FY-82	1,900,000

SPONSOR: Southwest Florida Water Management District

PROJECT DESCRIPTION: The project covers about 6,000 square miles in 14 counties in central and southwest Florida and includes the Hillsborough, Oklawaha, Withlacoochee, and Peace River basins and three coastal basins north of Tampa.

The project includes a number of flood detention areas designed to detain excess runoff during periods of heavy rainfall until the downstream conveyance capacities of the involved rivers will not be exceeded. In conjunction with the flood detention areas, where water is retained only temporarily so that existing natural biological communities can be preserved, the project involves a system of water control structures, canals, and levees designed to convey excess runoff during and after heavy rainfall. The system will also help preserve and augment existing water tables during droughts.

The FY-82 request includes monies for completion of S-159 on the Tampa Bypass Canal and for construction of recreational sites in the lower Hillsborough Wilderness Park.

PROJECT JUSTIFICATION: Three large floods in west-central Florida in 1959 and 1960 led to the authorization of the Four River Basins Project. Approximately one million acres were inundated by the most extreme of these floods (March, 1960). Completion of the project is vitally needed before a major storm again brings excessive property damage and human misery to the densely populated Tampa Bay area. In addition to providing badly needed flood protection, the project will also enhance water conservation in natural surface and sub-surface storage areas.

CENTRAL AND SOUTHERN FLORIDA WATER SUPPLY
(Study)

COST DATA:	Estimated Federal Cost	$2,130,000
	Estimated Non-Federal Cost	0
	Federal Funds Through FY-81	816,000
	President's Budget FY-82	650,000
	Corps Stated Capabilities FY-82	650,000
	State of Florida Request FY-82	650,000

SPONSOR: South Florida Water Management District

PROJECT DESCRIPTION: This continuing study is a review of prior Corps of Engineers reports to determine whether any modifications of the recommendations in these reports are advisable, in order to provide alternative sources of water supply from the Central and Southern Florida Flood Control Project. Such alternatives would include, but not be limited to, consideration of desalinization of salt and brackish water, groundwater storage and retrieval, and imports. A Stage I Reconnaissance Report was released in December, 1979, and it recommended that Stage II be initiated. FY-82 and subsequent funding would allow initiation and completion of Stage II. The study may eventually include the development of a predictive math model for ground and surface water usage and availability.

PROJECT JUSTIFICATION: When the earlier reports were prepared. deep aquifer storage and retrieval was recognized as promising but needing additional research. Research and planning studies since then have progressed sufficiently so that the feasibility of this alternative now warrants evaluation. Studies to date support both the potential for recovering significant quantities of water so stored and the technique's potentially high efficiencies in comparison to other alternatives being investigated as part of the South Florida Water Management District's water supply development planning. The studies are encouraging enough to warrant engineering cost and feasibility studies as proposed under this project.

CENTRAL AND SOUTHERN FLORIDA, C-18
(Study)

COST DATA:	Estimated Federal Cost	$676,000
	Estimated Non-Federal Cost	0
	Federal Funds Through FY-81	501,000
	President's Budget FY-82	175,000
	Corps Stated Capabilities FY-82	175,000
	State of Florida Request FY-82	175,000

SPONSOR: South Florida Water Management District

PROJECT DESCRIPTION: Canal 18 and the Loxahatchee River are located in northern Palm Beach and southern Martin Counties. This continuing study focuses on the problems associated with the canal and river, and it is evaluating possible flood control measures for the project area. Particular attention is to be paid to the vicinity of Jupiter Inlet and the Loxahatchee River, to modification of C-18, and to the entire area as a single watershed.

The study was initiated in FY-71, but funding problems prevented further work until FY-78. The study scope has been revised to meet the existing problems and needs within the study area, including water supply, water quality, flood protection, and environmental protection. A Stage I Reconnaissance Report was released in April, 1980, and it recommended that Stage II be initiated. The requested FY-82 funding would allow completion of the study.

PROJECT JUSTIFICATION: The Loxahatchee Canal (C-18) was originally designed and constructed to serve an area which was expected to be entirely agricultural. However, the area served by this canal has experienced rapid urban and industrial development since installation of C-18, and the authorized project works do not provide adequate flood protection and water control. This study is determining the feasibility and cost of providing this flood protection and water control, and it includes the flood plain analysis and collection of environmental and economic data required to develop project alternatives.

SUWANNEE RIVER BASIN SURVEY
(Study)

COST DATA:	Estimated Federal Cost	$1,500,000
	Estimated Non-Federal Cost	0
	Federal Funds Through FY-81	0
	President's Budget FY-82	50,000
	Corps Stated Capabilities FY-82	50,000
	State of Florida Request FY-82	100,000

SPONSOR: Suwannee River Water Management District

PROJECT DESCRIPTION: The Suwannee River drains an area of more than 10,000 square miles, about half in Florida and half in Georgia. This study would be designed to be a part of a comprehensive program of flood plain management for the river. The focus of the project would be an identification of specific programs to minimize flood damages in the Suwannee River drainage basin using non-structural alternatives. The study would address many additional issues including water quality, recreation, small boat navigation, fish and wildlife, forestry resources, scenic quality, and water supply for agricultural and other uses. Specific emphasis would be placed on hydrologic investigation and detailed mapping and modeling of the river flood plains.

The State of Florida has formed a Suwannee River Resource Management and Planning Committee to develop a comprehensive assessment of the problems in the Suwannee River Basin. The results of the committee's assessment would be incorporated into the early design of this study. The requested FY-82 funding would allow the study to begin.

PROJECT JUSTIFICATION: The Suwannee River Basin is quite floodprone. Three 100-year floods have occurred on the Suwannee during the past 36 years (in 1948, 1959, and 1973), with the largest (in 1973) causing about eight million dollars in damage. The basin is projected to be one of the fastest growing areas of Florida. Without a comprehensive assessment of the basin characteristics and proper identification of potential problem areas, much of this development will go unrestricted. All involved parties agree that protection and proper management of the river and its associated resources are essential. This study would be a vital contribution to that overall effort.

WITHLACOOCHEE RIVER REGION
WATER SUPPLY
(Study)

COST DATA:		
	Estimated Federal Cost	$350,000
	Estimated Non-Federal Cost	0
	Federal Funds Through FY-81	200,000
	President's Budget FY-82	150,000
	Corps Stated Capabilities FY-82	150,000
	State of Florida Request FY-82	150,000

SPONSOR: Withlacoochee Regional Water Supply Authority

PROJECT DESCRIPTION: The Withlacoochee Basin is located on the northwest coast of peninsular Florida and includes Levy, Marion, Citrus, Sumter, and Hernando Counties. This continuing study is determining the water supply sources and demands for the Withlacoochee Regional Water Supply Authority (WRWSA) area. The WRWSA intends the study to form a planning base to assure the availability of an adequate supply of freshwater. The study will also evaluate alternative supply sources for areas of potential shortage. The FY-82 funding request would allow completion of this three-year study.

PROJECT JUSTIFICATION: The population of the study area increased by 58% from 1970 (132,825) to 1977 (209,484). Citrus and Hernando counties are the first and third fastest growing counties in the State. Citrus County grew by 101% and Hernando County by 90% from 1970-1977. This phenomenal growth has already led to significant water shortage in coastal Citrus County, and additional shortages are likely in the near future in other coastal areas of the region. Without a plan for dealing with water shortages or for projecting water sources and demands, wise decisions cannot be made on water use in the region. This study is providing the data base for such a plan.

FORT PIERCE HARBOR
(Construction)

COST DATA:

Estimated Federal Cost	To be determined
Estimated Non-Federal Cost	To be determined
Federal Funds Through FY-81	0
President's Budget FY-82	0
Corps Stated Capabilities FY-82	0
State of Florida Request FY-82	100,000

SPONSOR: Fort Pierce Port and Airport Authority

PROJECT DESCRIPTION: The existing channel in Fort Pierce Harbor is 25 feet deep and 3.5 miles long, extending from the Atlantic Ocean through Fort Pierce Inlet and across the Indian River to the Fort Pierce city docks. The turning basin in front of the docks is also 25 feet deep. This project would deepen the channel and turning basin to the depth judged most economically feasible. If the feasibility study (now nearing completion) is favorable, the requested FY-82 funding would be used to initiate preparation of a General Design Memorandum and an Environmental Impact Statement for the project.

PROJECT JUSTIFICATION: The recent economic situation has so adversely affected Fort Pierce and St. Lucie County that the U.S. Department of Commerce has informed local authorities that the area qualifies for designation as a redevelopment area. An increase in shipping would help alleviate the situation, but channel and turning basin depths in Fort Pierce Harbor are now too shallow to allow economical shipping. Thus, this project could contribute substantially to an economic revitalization of Fort Pierce and St. Lucie County.

PORT EVERGLADES
(Construction)

COST DATA:

Estimated Federal Cost	$33,800,000
Estimated Non-Federal Cost	8,460,000
Federal Funds Through FY-81	20,118,000
President's Budget FY-82	13,982,000
Corps Stated Capabilities FY-82	13,982,000
State of Florida Request FY-82	13,982,000
Benefit Cost Ratio 1.7:1	

SPONSOR: Port Everglades Authority

PROJECT DESCRIPTION: Port Everglades is located in Broward County on Florida's lower east coast. The authorized project involves: deepening the ocean entrance channel to forty-five feet to just inside the jetties, thence forty-two feet to and including the main turning basin, and widening the 300-foot wide section of the entrance channel to 450 feet; extension of the main turning basin about 200 feet to the southeast; widening the locally provided 36-foot-deep Pier 7 channel to 400-foot width; and maintenance of the locally provided Berth 18 channel to 36-foot depth. The requested FY-82 funding would allow completion of the project.

PROJECT JUSTIFICATION: The project will allow larger ships, especially petroleum tankers, to enter Port Everglades, thereby reducing the cost per ton for shipping charges. The Port is a primary distribution and collection center for an east coast tributary area which contains thirty-six percent of the State's population and produces forty-two percent of the State's total personal income. Annual traffic flow now exceeds 10 million tons.

PORT MANATEE
(Construction)

COST DATA:		
	Estimated Federal Cost	$6,500,000
	Estimated Non-Federal Cost	2,500,000
	Federal Funds Through FY-81	0
	President's Budget FY-82	0
	Corps Stated Capabilities FY-82	0
	State of Florida Request FY-82	300,000
	Benefit Cost Ratio: 9.3:1	

SPONSOR: Manatee County Port Authority

PROJECT DESCRIPTION: The Manatee Harbor project involves federal assumption of the existing navigation channel constructed by the Manatee County Port Authority in 1969-71. The project includes both removal of materials deposited in the channel since its construction and new construction at both ends of the channel. The channel would be 40 feet deep and would extend from the port facilities to the main Tampa Harbor Channel. The northwest end of the channel would intersect the main Tampa Harbor Channel in an expanded "widener." Approximately 1,175,000 cubic yards of material would be excavated from the channel and deposited on upland sites. The existing turning basin at Port Manatee would be expanded by 6.6 acres with an excavation of about 510,000 cubic yards of material, also to be deposited on upland sites. Ten acres of an existing above-water spoil island would be lowered to -2 feet MLW to compensate for the destruction of the 6.6 acres of vegetated bay bottom.

This project is currently under review for Congressional authorization. Therefore, the Corps has not expressed a capability for the necessary engineering and design work. Should Congress act to authorize the project, the requested FY-82 funding would allow preparation of the General Design Memorandum and Environmental Impact Statement for the project.

PROJECT JUSTIFICATION: Waterborne commerce through facilities located at Port Manatee is being restricted by inadequate channel depth caused by shoaling. Also, tidal currents at the entrance to the port channel make navigation of the turn from the main Tampa Harbor channel quite hazardous. Vessels with drafts in excess of 25 feet must wait near Egmont Key, at the mouth of Tampa Bay, for slack tide. An enlarged widener would allow 24 hour access to port facilities.

TAMPA HARBOR DEEPENING - MAIN CHANNEL
(Construction)

COST DATA:		
	Estimated Federal Cost	$183,000,000
	Estimated Non-Federal Cost	4,055,000
	Federal Funds Through FY-81	96,605,000
	President's Budget FY-82	38,000,000
	Corps Stated Capabilities FY-82	38,000,000
	State of Florida Request FY-82	38,000,000
	Benefit Cost Ratio 1.7:1	

SPONSOR: Tampa Port Authority

PROJECT DESCRIPTION: This project provides for deepening and enlarging channels in Tampa Bay from the Gulf of Mexico to Upper Hillsborough Bay and in adjacent areas including: enlarging the existing entrance channel across Egmont Bay to a depth of 45 feet and a width of 700 feet; enlarging the existing Mullet Key Cut Channel to a depth of 43 feet and a width of 600 feet; enlarging the existing Tampa Bay Channel to a depth of

43 feet and width of 500 feet; enlarging the existing Hillsborough Bay Channel to a depth of 43 feet and a width of 500 feet to the junction with the Port Sutton entrance channel, and thence deepening to 41 feet at the existing width of 400 feet to the junction with Seddon and Sparkman Channels; enlarging the existing Port Sutton Turning Basin to a depth of 43 feet; deepening the existing Sparkman Channel to 41 feet; deepening the existing Ybor Channel to a depth of 39 feet; enlarging the existing turning basin at the entrance to Ybor Channel to a depth of 41 feet; deepening the existing Port Tampa Channel to a depth of 41 feet; deepening the existing Port Tampa Turning Basin to 41 feet; providing an entrance channel in East Bay to a depth of 43 feet; providing an approach channel in East Bay to a depth of 43 feet; and maintaining the Port Sutton terminal channel to a depth of 43 feet. In addition, cuts will be made through three existing spoil islands in Hillsborough Bay to improve the weak tidal circulation of that bay. The requested FY-82 funding will allow this large, complex project to progress on schedule.

PROJECT JUSTIFICATION: The deepening of Tampa Harbor will provide access for deeper draft vessels entering and leaving the Port of Tampa and Port Manatee. Tampa Harbor, which annually handles over 42 million tons, is Florida's largest port. Deepening and enlarging the entrance channels, turning basins, and side channels to 43 feet will allow heavier loading of cargo vessels handling bulk products, including petroleum byproducts and phosphate. Access for deeper draft vessels will result in lower transportation costs for these commodities.

TAMPA HARBOR BIG BEND AND ALAFIA RIVER CHANNELS
(Study)

COST DATA:		
	Estimated Federal Cost	$303,000
	Estimated Non-Federal Cost	0
	Federal Funds Through FY-81	150,000
	President's Budget FY-82	153,000
	Corps Stated Capabilities FY-82	153,000
	State of Florida Request FY-82	153,000

SPONSOR: Tampa Port Authority

PROJECT DESCRIPTION: This is a feasibility study of further modification of the existing federal navigation project for the Alafia River and the existing local navigation project for Big Bend Channel. Emphasis will be placed on the feasibility of deepening and widening the existing channels to accommodate the larger vessels that will use the 43-foot Tampa Harbor Main Channel currently under construction. Alafia River is an existing federal project with a channel 30 feet deep by 200 feet wide from the ship channel in Hillsborough Bay to and including a turning basin 700 feet wide and 1,200 feet long in the Alafia River. Total length is 3.6 miles. Big Bend Channel is a privately constructed and maintained channel 35 feet deep by 200 feet wide from the ship channel in Hillsborough Bay to and including a turning basin 1,000 feet long by 700 to 1,500 feet wide. Total length is 2.2 miles. The requested FY-82 funding would allow completion of the study.

PROJECT JUSTIFICATION: Major commodities shipped through these channels include phospate, coal, and sulfur. The local sponsor believes that depths greater than those currently existing are necessary to allow efficient loading of ships that would utilize the facilities provided. This study will determine the optimum depths for the two channels so that shipping through them can be done most efficiently and economically.

CANAVERAL HARBOR
(Study)

COST DATA:	Estimated Federal Cost	To be determined
	Estimated Non-Federal Cost	0
	Federal Funds Through FY-81	0
	President's Budget FY-82	0
	Corps Stated Capabilities FY-82	To be determined
	State of Florida Request FY-82	$50,000

SPONSOR: Canaveral Port Authority

PROJECT DESCRIPTION: The proposed project is to conduct an economic feasibility study to determine the advisability of modifying the existing federal project to provide for federal maintenance dredging of the harbor channel. In addition, the Port Authority wishes to complete the previously authorized channel between the central and west turning basins to a depth of 31 feet and a width of 400 feet, and the western turning basin to a depth of 31 feet.

PROJECT JUSTIFICATION: Currently, the port channel is maintained at the proposed authorized depth by the Navy to assure access to the Trident turning basin. The port in total is currently being maintained by the Navy, the Corps, and the Port Authority. This has resulted in many contracting conflicts which have made dredging more expensive than if dredging were done under a single contract. To rectify the situation, the Port Authority is requesting the proposed study to determine the feasibility of the Corps assuming all maintenance work.

Port Canaveral is now being seriously considered by utility company representatives as a future importation site for coal to be used in electrical power generation in the eastern half of the Florida peninsula. This study could provide information of great value to possible future expansion of the port's facilities to accommodate coal importation.

GULF COAST PASSES
(Study)

COST DATA:	Estimated Federal Cost	$463,000
	Estimated Non-Federal Cost	0
	Federal Funds Through FY-81	110,000
	President's Budget FY-82	0
	Corps Stated Capabilities FY-82	150,000
	State of Florida Request FY-82	150,000

SPONSOR: West Coast Inland Navigation District

PROJECT DESCRIPTION: This study would continue a comprehensive feasibility report by the Corps of Engineers to consider designating Stump Pass (Charlotte County), Big Sarasota Pass (Sarasota County), Longboat Pass (Manatee County), and Hurricane and Dunedin Passes (Pinellas County) as integral parts of the Intracoastal Waterway. The study should determine the feasibility of maintaining these passes at nine feet for commercial and recreational boats, providing suitable material for renourishment of adjacent public beaches, and providing safe and economical boat passage to the Gulf from protected inland waters.

PROJECT JUSTIFICATION: Boating safety in the project area would be substantially enhanced by federal assumption of the responsibility for maintenance dredging of these passes. An investigation is also needed of the feasibility of using material dredged from these passes for renourishment of adjacent beaches. The following would be evaluated in the feasibility study: the amount of material to be obtained from the initial excavation of these passes for beach renourishment; the amount of boating traffic; the savings associated with fewer bridge openings; and the savings of local funds for maintenance dredging.

JUPITER INLET
(Study)

COST DATA:

Estimated Federal Cost	$280,000
Estimated Non-Federal Cost	0
Federal Funds Through FY-81	0
President's Budget FY-82	0
Corps Stated Capabilities FY-82	30,000
State of Florida Request FY-82	30,000

SPONSOR: Jupiter Inlet District

PROJECT DESCRIPTION: Jupiter Inlet is a natural inlet in northern Palm Beach County about sixteen miles south of St. Lucie Inlet and fourteen miles north of Lake Worth Inlet. The requested study would determine if improvements to Jupiter Inlet would allow small boat navigation to be more cost effective. The requested FY-82 funding would be used to develop a plan of study and conduct initial public meetings.

PROJECT JUSTIFICATION: In its present condition, Jupiter Inlet does not adequately provide for safe passage of recreational, charter and commercial fishing boats. Permanent jetties now extend into the ocean on both sides of the inlet, and sand is dredged from the inlet about every two years and deposited on the beach to the south. Local interest in improving the inlet to make it safer for navigation is considerable. In the 1960's the Corps of Engineers conducted a feasibility study of improving the inlet, but such a project could not then be justified economically. Since that time, population, boating, and commercial fishing in the area have increased significantly. Thus, the project may now have a positive economic impact.

MEXICO BEACH INLETS
(Study)

COST DATA:

Estimated Federal Cost	$200,000
Estimated Non-Federal Cost	0
Federal Funds Through FY-81	0
President's Budget FY-82	0
Corps Stated Capabilities FY-82	0
State of Florida Request FY-82	50,000

SPONSOR: Town of Mexico Beach, Florida

PROJECT DESCRIPTION: This project, in Bay County, is a feasibility study of maintenance of a canal inlet and placement of dredged material from the canal onto public beaches. The canal is approximately 50 feet wide with an approximately 50-foot long boulder jetty extending seaward from the western edge. During periods of high wave energy, littoral drift deposits sand in the canal's entrance, thereby reducing, and at times eliminating, boating access much of the year.

PROJECT JUSTIFICATION: The economy of the Mexico Beach area is nearly totally tourist oriented with boaters providing a large portion of the area's revenues. The sedimentation problem in the canal has obstructed boat traffic and is responsible for a decrease in boating activity, both commercial and recreational. Thus, matinenance of a navigable channel and renourishment of the adjacent beach would boost the local economy. In addition, safe refuge would be provided for boats during storm conditions. Currently, no safe harbor exists between Port St. Joe and Panama City Beach.

PORT BOCA GRANDE
(Study)

COST DATA:

Estimated Federal Cost	$399,000
Estimated Non-Federal Cost	0
Federal Funds Through FY-81	6,000
President's Budget FY-82	0
Corps Stated Capabilities FY-82	120,000
State of Florida Request FY-82	120,000

SPONSOR: Lee County Port Authority

PROJECT DESCRIPTION: Port Boca Grande, in Lee County, is on the southern end of Gasparilla Island and is accessed from the Gulf of Mexico through Boca Grande Pass. The Port is about 70 miles south of Tampa Bay and 150 miles north of Key West. Boca Grande is a naturally deep inlet, although it is maintained at a 32-foot depth and 300-foot width by the Corps of Engineers.

Local interests desire a feasibility study to investigate the environmental, economic, and engineering aspects of modifying the existing channel and turning basin adjacent to Gasparilla Island. In addition, this study should investigate the feasibility of utilizing the spoil from regular maintenance dredging for renourishment of beaches on Gasparilla, Captiva, and Estero Islands. A previous study (Charlotte Harbor) raised considerable local and State reaction to the suggestion of constructing a channel across Charlotte Harbor to the mainland. This alternative has been eliminated from further consideration and the current study area would be confined to the current facilities on Gasparilla Island. FY-82 funding would allow initiation of the study effort.

PROJECT JUSTIFICATION: Lee County, through its consultants, is in the process of developing a master plan for Port Boca Grande. The requested Corps of Engineers feasibility study would compliment Lee County's efforts by evaluating the environmental and economic aspects of any recommendations from the master plan.

Some of the beaches of Lee County are now substantially eroded. Spoil from maintenance and other dredging at Port Boca Grande could possibly be used to renourish these beaches. The requested study could profitably address this possibility.

PORT OF PALM BEACH
(Study)

COST DATA:

Estimated Federal Cost	$130,000
Estimated Non-Federal Cost	0
Federal Funds Through FY-81	0
President's Budget FY-82	0
Corps Stated Capabilities FY-82	50,000
State of Florida Request FY-82	50,000

SPONSOR: Port of Palm Beach District

PROJECT DESCRIPTION: In 1976, the Port of Palm Beach constructed, at its own expense, a twenty-five foot deep turning basin extension to the north of the federally authorized and maintained project. The extension is an irregular polygon with a maximum east-west length of about 1,475 feet and a maximum north-south width of about 700 feet. The Port is now requesting a study of the feasibility of modifying the existing authorized project to include federal assumption of the maintenance of the new portion of the turning basin.

PROJECT JUSTIFICATION: The extension to the federally maintained project cost the Port of Palm Beach approximately $500,000. That original federal project now needs to be reassessed regarding possible modification of the project to include federal maintenance dredging of the extension. This study was authorized by resolution dated May, 1979; however, funding has not been available to initiate the study effort.

TAMPA HARBOR CHANNEL REALIGNMENT
(Study)

COST DATA:

Estimated Federal Cost	$250,000
Estimated Non-Federal Cost	0
Federal Funds Through FY-81	0
President's Budget FY-82	0
Corps Stated Capabilities FY-82	0
State of Florida Request FY-82	$100,000

SPONSOR: Tampa Port Authority

PROJECT DESCRIPTION: Ships entering Tampa Harbor must negotiate a bend in the harbor channel located approximately three-fourths of a mile to the west (the seaward side) of the Sunshine Skyway Bridge. This bend has been criticized by maritime officials and others and may have contributed to the two major shipping disasters discussed below.

This new study would investigate effects of this channel bend on shipping and evaluate the possible need for realignment of the channel. The requested FY-82 funding would allow the study to begin should necessary Congressional authorization be obtained.

PROJECT JUSTIFICATION: The Tampa Bay Pilots Association, the Florida Engineering Society Commission, and ship captains have all indicated a need to realign Tampa Harbor Channel so that ships are not forced to negotiate a turn so close to the Sunshine Skyway Bridge. This turn may have seriously influenced the course of the Summit Venture, a freighter that collided with the bridge in 1980 with a resultant loss of more than 30 lives and one span of the bridge. The turn is also in the area where the Coast Guard Cutter Blackthorn in 1979 collided with another ship in what became the Coast Guard's worst peacetime disaster.

DADE COUNTY BEACH EROSION CONTROL AND HURRICANE PROTECTION
(Construction)

COST DATA:

Estimated Federal Cost	$37,300,000
Estimated Non-Federal Cost	31,039,000
Federal Funds Through FY-81	21,939,000
President's Budget FY-82	9,300,000
Corps Stated Capabilities FY-82	9,300,000
State of Florida Request FY-82	9,300,000

Benefit Cost Ratio: 4.8:1

SPONSOR: Metropolitan Dade County

PROJECT DESCRIPTION: This ongoing project will place 13.5 million cubic yards of sand on the Dade County shoreline to form a protective and recreational beach and protective dune for 9.3 miles of shore between Government Cut and Bakers Haulover Inlet. This area includes Miami Beach, Surfside, and Bal Harbour. The project is also providing beach erosion control at Haulover Beach Park by initially placing 0.2 million cubic yards of material along 1.2 miles of shore to form a protective recreational beach.

The project is programmed in five phases. Phases I-IV and 50% of Phase V (which includes 11th Street to Haulover Beach) will have been completed by the end of FY-81. FY-82 funds would be used to complete Phase V for beach renourishment from 11th street south to Government Cut and to begin initial replenishment in the northern project area.

PROJECT JUSTIFICATION: The project is designed to provide beach erosion control and hurricane surge protection for beaches of great economic importance. Dade County's beaches provide badly needed recreational opportunities for the densely populated coastal sections of the County. In addition, the beaches are extremely important tourist attractions, and the economy of the area would suffer significantly if the beaches were not preserved and improved.

DADE COUNTY HAULOVER BEACH PARK NORTH
(Construction)

COST DATA:	Estimated Federal Cost	To be determined
	Estimated Non-Federal Cost	To be determined
	Federal Funds Through FY-81	$209,000
	President's Budget FY-82	0
	Corps Stated Capabilities FY-82	0
	State of Florida Request FY-82	150,000

SPONSOR: Metropolitan Dade County

PROJECT DESCRIPTION: A 1976 House Resolution requested a review of the Dade County Beach Erosion Control and Hurricane Protection Project, with particular reference to the advisability of extending the authorized project improvements from Haulover Beach Park to the Broward County Line (14.3 miles of shoreline). This continuing review is determining means whereby beach erosion and hurricane induced flooding can be controlled in the project area. The Corps of Engineers has released the Stage II (Development of Intermediate Plans) Report for the project, and the Stage III (Development of Detailed Plans and Plan Selection) Report should be released in late FY-81 or early FY-82. Assuming that Congress will provide the necessary authorization for construction, the requested FY-82 funding would be used to begin preparation of a General Design Memorandum and an Environmental Impact Statement.

PROJECT JUSTIFICATION: The combined effect of wind, waves, and tides amplified during storm conditions has resulted in erosion and lowering of the beach profiles and recession of the shoreline in the study area. At a large number of locations along the study site, erosion has undermined or threatened to undermine shorefront structures. Recession of the shoreline is causing the loss of valuable property, and at many locations seawalls are under direct wave attack. A beach erosion project could provide hurricane surge protection and beach erosion control to the area as well as meet recreational requirements of the region. This review is addressing the feasibility of such a project.

PANAMA CITY BEACHES EROSION CONTROL AND HURRICANE PROTECTION
(Construction)

COST DATA:	Estimated Federal Cost	$32,900,000
	Estimated Non-Federal Cost	15,500,000
	Federal Funds Through FY-81	0
	President's Budget FY-82	0
	Corps Stated Capabilities FY-82	400,000
	State of Florida Request FY-82	400,000
	Benefit Cost Ratio: 6.2:1	

SPONSOR: Bay County

PROJECT DESCRIPTION: The proposed project, located in Bay County, includes 18.5 miles of beach restoration plus an artificial dune and berm system between Phillips Inlet and the entrance channel into Panama City Harbor. The work involves dredging offshore at the 10-fathom (60-foot) contour, which varies between one-half to one mile offshore. The entire project would initially require 7,965,000 cubic yards of sand. Renourishment of the beach would require 946,000 cubic yards of sand at 10-year intervals. The plan also provides for public access across the dunes (via 290 dune bridges) and revegetation of the artificial dunes. The requested FY-82 funding would initiate the development of a Phase 1 General Design Memorandum and Environmental Impact Statement.

PROJECT JUSTIFICATION: Florida's Northwest Gulf Coast is periodically battered and flooded by hurricanes, tropical storms, and other severe weather conditions which cause extensive damage to coastal construction and result in beach erosion and inlet modifications. Hurricane Eloise struck Panama City in September of 1975 and caused over $80 million in property damage along an 18.5 mile reach of the Coast. Prior to this hurricane, the Panama City Beaches had been classified as areas of critical erosion by a Florida Department of Natural Resources study in 1973.

This project would decrease the current erosion rate and provide protection from flooding and wave damage caused by storm surges. The project would also enhance beach recreation opportunities in the Panama City area. Panama City is known for its beaches, and the area's economy is heavily dependent upon the availability of high quality beach recreation.

PINELLAS COUNTY BEACHES
(Construction)

COST DATA:	Estimated Federal Cost	$ 6,160,000
	Estimated Non-Federal Cost	19,500,000
	Federal Funds Through FY-81	1,360,000
	President's Budget FY-82	1,000,000
	Corps Stated Capabilities FY-82	1,000,000
	State of Florida Request FY-82	1,000,000
	Benefit Cost Ration: 2.4:1	

SPONSOR: Pinellas County Board of County Commissioners

PROJECT DESCRIPTION: Under the Pinellas County Beaches Project, structural modifications and sand renourishment are authorized for beaches on Clearwater Beach, Sand Key, Treasure Island, and Long Key. The FY-82 request is for construction activity and renourishment for Sunset Beach on Treasure Island. A groin on the north shore of Blind Pass will be elevated and extended (to a total length of 456 feet), and the beach will be renourished for approximately one mile from Blind Pass northward.

The specific objectives of the FY-82 project are to establish and maintain a sufficient dimension of barrier beach to provide storm protection to Sunset Beach and Treasure Island and to provide ample recreational beach area to the general public including residents of Pinellas County, tourists, and visitors.

PROJECT JUSTIFICATION: Pinellas County is a densely populated urban county with a total population in excess of 650,000. The County also is a significant tourist area visited annually by approximately 3.5 million tourists who contribute nearly $1 billion to the area's economy. These tourists are attracted to the County because of the climate and the beach areas. Many of the County's beaches are in a critical state of erosion. Thus, renourishment of these beaches will help maintain the county's economic balance and enhance future beach recreation opportunities for county residents and visitors.

FLAGLER COUNTY BEACH EROSION CONTROL
(Study)

COST DATA:

Estimated Federal Cost	$160,000
Estimated Non-Federal Cost	0
Federal Funds Through FY-81	80,000
President's Budget FY-82	80,000
Corps Stated Capabilities FY-82	80,000
State of Florida Request FY-82	80,000

SPONSOR: City of Flagler Beach

PROJECT DESCRIPTION: The study area is the Atlantic Ocean shoreline of Flagler County, from the St. Johns County line on the north to the Volusia County line on the south. The cities of Bunnell, Palm Coast, Beverly Beach, Painters Hill, Marineland, and Flagler Beach are included in the study area. The purpose of the study is to determine the condition and the rate of deterioation of the extensively eroded beaches of the shores of Flagler County and to determine the feasibility of undertaking suitable corrective work.

Since relatively little development has occurred upland of the project beaches, a study of this type can focus on construction standards, floodplain management, hurricane surge protection, and other issues directly related to minimizing beach erosion by proper development of the shoreline. The Reconnaissance Report for this study was issued in August, 1980, and the requested FY-82 funding would allow completion of the study.

PROJECT JUSTIFICATION: Past hurricanes and Atlantic Ocean storms have caused serious shoreline damage and considerable erosion of the coast in the vicinity of Highway A1A and the City of Flagler Beach. Public use of these beaches must be protected, and destruction of public roadways, utilities, and private and municipal properties that front the shoreline must be prevented. Finally, the project area will receive future economic and environmental benefits in that planned development of the beaches will be guided by the results of this study.

SARASOTA COUNTY BEACHES
(Survey Restudy)

COST DATA:

Estimated Federal Cost	$373,000
Estimated Non-Federal Cost	0
Federal Funds Through FY-81	244,000
President's Budget FY-82	126,000
Corps Stated Capabilities FY-82	126,000
State of Florida Request FY-82	126,000

SPONSOR: Sarasota County

PROJECT DESCRIPTION: This restudy encompasses the Gulf of Mexico shoreline of Sarasota County. The purpose of the restudy is to determine the condition of the fragile barrier island and the exposed mainland shoreline and to determine the feasibility of undertaking suitable restorative work. The funds requested for FY-82 would complete this study.

PROJECT JUSTIFICATION: Sarasota County is one of the State's most rapidly growing counties. This rapid population growth plus the county's location necessitate adequate beach recreation areas. Unfortunately, past hurricanes and other storms have caused substantial shoreline recession. The remaining beaches must be preserved. In addition, the destruction of abutting property improvements, including single and multi-family housing, public roadways, and utility facilities, must be improved.

BISCAYNE BAY
(Study)

COST DATA:

Estimated Federal Cost	$2,200,000
Estimated Non-Federal Cost	0
Federal Funds Through FY-81	0
President's Budget FY-82	0
Corps Stated Capabilities FY-82	100,000
State of Florida Request FY-82	100,000

SPONSOR: Metropolitan Dade County

PROJECT DESCRIPTION: This project is designed to provide a comprehensive review of environmental impacts from federally authorized and constructed projects within and adjacent to Biscayne Bay. The study would include a review of such projects as the Intracoastal Waterway (ICW), Government Cut, Bakers Haulover Inlet, the Central and Southern Florida Flood Control Project, and causeway construction to determine the impacts of these projects on the biological and chemical quality of Biscayne Bay and to suggest possible solutions to these problems.

The study would also address impacts from dredge and fill activities on circulation patterns and flushing, the effect of the ICW spoils islands on water quality, and the effects of modified freshwater inputs into the Bay. The requested FY-82 funding would allow initiation of the study.

ROJECT
USTIFICATION: Biscayne Bay and the adjacent shoreline have been subjected to intense development and alterations through federally authorized construction projects. The cumulative impacts of these projects on the Biscayne Bay system are not known. However, local government studies have determined that water quality in the bay is poor, especially north of Rickenbacker Causeway. Excessive turbidity and reduced flushing are major problems. The information generated by this proposed study is needed for the development of a judicious management program and for the development of guidelines for future use of the bay.

GOLDEN GATE ESTATES WATER RESOURCES REDEVELOPMENT
(Study)

COST DATA:		
	Estimated Federal Cost	$1,200,000
	Estimated Non-Federal Cost	0
	Federal Funds Through FY-81	272,000
	President's Budget FY-82	0
	Corps Stated Capabilities FY-82	453,000
	State of Florida Request FY-82	453,000

SPONSOR: The South Florida Water Management District

PROJECT DESCRIPTION: This study is examining the feasibility of redeveloping the water management system of the Golden Gate Estates (GGE) area in western Collier County. This 120,000 acre development, initiated in 1961 in the westernmost fringes of the Big Cypress Swamp, currently has 183 miles of drainage canals and 813 miles of roads. The study includes: 1) a review of previous studies of the GGE and surrounding areas; 2) collection of additional hydrologic and other data necessary for a full evaluation of the GGE area; 3) review and analysis of existing redevelopment proposals; and 4) recommendation of a redevelopment plan to mitigate existing water resource and environmental problems and to provide flood control, recreation, and other benefits, all consistent with the preservation of natural resources.

A Stage I Reconnaissance Report was released in April of 1980 and recommended that Stage II studies be initiated. The Reconnaissance Report reviewed prior studies of GGE, identified existing problems, and proposed six alternative restoration plans. FY-82 funding would allow these intermediate plans to be developed completely and would support additional hydrological monitoring.

PROJECT JUSTIFICATION: The environmental disturbances which have resulted from the GGE canal system are substantial and well documented. They include: 1) disruption of natural flow patterns and major transfers of water from one basin to another; 2) lowering of wet season water tables by as much as two to eight feet; 3) a reduction of the hydroperiod by two or three months; 4) increasing frequency of wildfires; and 5) increasing annual runoff by two to three times.

A redevelopment of this system is considered to be mandatory in order to mitigate continuing and severe disruptions to the water and land resources of not only the GGE area itself, but also areas contiguous to it, such as the Fahkahatchee Strand, prime agricultural areas north of GGE, and estuarine areas of Southwest Florida, particularly Fahka Union Bay and Naples Bay. If the present canal system to GGE is not significantly modified, adverse effects may also be felt in the nearby Corkscrew Sanctuary and in some estuarine areas of Everglades National Park.

KISSIMMEE RIVER SURVEY REVIEW
(Study)

COST DATA:		
	Estimated Federal Cost	$2,130,000
	Estimated Non-Federal Cost	0
	Federal Funds Through FY-81	1,653,000
	President's Budget FY-82	377,000
	Corps Stated Capabilities FY-82	377,000
	State of Florida Request FY-82	377,000

SPONSOR: South Florida Water Management District and Department of Environmental Regulation, in conjunction with the Coordinating Council on the Restoration of the Kissimmee River Valley and Taylor Creek-Nubbin Slough Basin.

PROJECT DESCRIPTION: This study is a review of prior State and Federal activities in the Kissimmee River Valley and Taylor Creek-Nubbin Slough Basin which resulted in a channelization of the Kissimmee River and other construction projects. The study is addressing the following: the quality of water entering the Kissimmee River, Taylor Creek-Nubbin Slough, and Lake Okeechobee; flood control; recreation; navigation; loss of fish and wildlife resources; other current and foreseeable environmental problems; and loss of environmental amenities. The study will include an evaluation of dechannelization alternatives for and restoration of the Kissimmee River. The requested FY-82 funding would allow Stage II (Development of Intermediate plans) to continue.

PROJECT JUSTIFICATION: Channelization of the Kissimmee River has been accompanied by numerous negative environmental impacts reflected in the continuing degradation of water quality in the Kissimmee River (C-38) and Lake Okeechobee. These impacts include: intensified agricultural land uses resulting in increased nutrient loading; intensified secondary drainage and increased irrigation demand; residential encroachment in flood-prone areas; loss of thousands of acres of wetlands; and loss of fish, wildlife, and other environmental amenities. In addition, expanding urbanization in the upper chain of lakes in the Kissimmee River drainage basin has negatively affected water quality, thus presenting a clear danger to the river and Lake Okeechobee.

The State of Florida has invested over $2,000,000 in programs designed to address environmental problems in the project area. The results of these efforts are being incorporated into the survey review process.

LITTLE ECON RIVER RESTORATION
(Study)

COST DATA:

Estimated Federal Cost	To be determined
Estimated Non-Federal Cost	0
Federal Funds Through FY-81	0
President's Budget FY-82	0
Corps Stated Capabilities FY-82	0
State of Florida Request FY-82	$50,000

SPONSOR: Orange County

PROJECT DESCRIPTION: The Little Econ River drainage basin includes about forty square miles in the east Orlando area. The area is nearly 100% developed. However, this rapid residential development has not been well coordinated with existing surface drainage systems. Thus, the area's susceptibility to flooding is uncertain.

This new study would determine potential flooding in the area during and after a 100-year storm as well as identify the water quality problems associated with the area's rapid development. Potential solutions to these flooding and water quality problems would then be evaluated. Finally, the feasibility of restoring the Little Econ River to a reasonably natural state would be investigated. Should the local sponsor obtain the necessary Congressional authorization, the requested FY-82 funding would allow initiation of the study.

PROJECT JUSTIFICATION: Thousands of people are now living in this drainage basin which is a low-lying and poorly drained area. The basin has not recently experienced extended periods of heavy rainfall; however, the lack of detailed studies of the basin leave the area's residents in an uncertain position. In addition, severe water quality problems have been documented in the project area and are contributing to the degradation of downstream bodies of water, including the St. Johns River. The proposed study is an attempt to address these problems, to anticipate future problems, and to identify corrective measures.

SHARK RIVER SLOUGH
(Study)

COST DATA:

Estimated Federal Cost	$402,000
Estimated Non-Federal Cost	0
Federal Funds Through FY-81	256,000
President's Budget FY-82	146,000
Corps Stated Capabilities FY-82	146,000
State of Florida Request FY-82	146,000

SPONSOR: South Florida Water Management District

PROJECT DESCRIPTION: Shark River Slough lies along the eastern boundary of Everglades National Park immediately south of the Tamiami trail. The slough is the historical floodway for Everglades water moving south from Lake Okeechobee to the Gulf of Mexico. The artificially regulated flows now entering the Park are causing some modification of the Park's ecosystem.

This study is investigating the feasibility of structural modifications to enhance sheet flow through Shark River Slough, thus approximating historic conditions. The study will focus on water quantity since an East Everglades 208 study is currently addressing the water quality aspects of reestablishing sheet flow. The requested FY-82 funding would allow completion of the study.

PROJECT JUSTIFICATION: Shark River Slough was included in the original boundaries of Everglades National Park. The later decision to exclude the slough from Park control was not based on hydrology. However, the slough must be preserved if Everglades National Park is to maintain its integrity. Dade County, in its 1975 land use development master plan, zoned the area being studied as a preservation or environmentally sensitive area. This zoning is now restricting development, but urbanization pressures will soon reach this area.

Evidence from on-going research indicates that the present water delivery system through Shark River Slough is adversely affecting fishing, wildlife, and plant communities within Everglades National Park. A more natural sheet flow through the slough seems essential if these adverse impacts are to be halted and then reversed. This study will identify the best alternative to provide the needed sheet flow.

SIX MILE CYPRESS
(Study)

COST DATA:

Estimated Federal Cost	$369,000
Estimated Non-Federal Cost	0
Federal Funds Through FY-81	0
President's Budget FY-82	0
Corps Stated Capabilities FY-82	50,000
State of Florida Request FY-82	50,000

SPONSOR: Lee County

PROJECT DESCRIPTION: Six Mile Cypress Strand is located approximately three miles southeast of Fort Myers. Development pressures are encroaching upon the strand, and its surface and groundwaters are being overdrained. Exotic plants are now replacing the native cypress.

The proposed study would focus on the technical and economic feasibility of at least two management actions: purchase of a portion of the strand; and construction of permanent water control structures. These actions would complement similar activities by Lee County. Funding requested would allow initiation of the study.

PROJECT JUSTIFICATION: Six Mile Cypress Strand is one of the last major undisturbed cypress areas in Lee County. The strand forms a natural buffer between the Fort Myers urban area and the proposed regional airport. The development pressures and overdrainage mentioned above are collectively threatening to destroy the strand. A referendum for the public purchase of a major portion of Six Mile Cypress Strand was overwhelmingly approved by the citizens of Lee County in 1976. This study would be an important step toward preservation of the strand.

JACKSONVILLE DISTRICT
Continuing Authorities Projects
New Study Requests

PROJECT: Huguenot Memorial Park

COST DATA: FY-82 Funding Requirements $50,000

DESCRIPTION: Huguenot Memorial Park is on a small island located in northeastern Duval County, approximately twelve miles northeast of the center of Jacksonville. The 450 acre park contains prime beach, dune and upland coastal habitats and excellent fishing, boating, and swimming areas. The overall objectives of the project are to make the best use of the land, control its use, reduce abuse of the natural beauty of the area, and provide badly needed recreation for Duval County citizens.

JUSTIFICATION: In 1971, a Jacksonville Area Planning Board advisory committee reported that the City was far below the national average in recreational space available per resident. The City has worked diligently to improve this situation, but additional recreational areas are still badly needed. This proposed project would provide the residents of Jacksonville (and others) with an easily accessed area of unusual beauty and recreational appeal. Funds requested would be allocated through the discretionary funds of the Chief of Engineers for Code 710 Recreation Projects.

PROJECT: Kissimmee Lakefront Recreation Improvements, Lake Tohopekaliga

COST DATA: FY-82 Funding Requirements $50,000

DESCRIPTION: This proposal is for Lake Tohopekaliga water access/recreation improvements. The project will create a recreational area along 5,600 feet of the lake's shoreline within the city limits of Kissimmee. This application requests construction of covered picnic facilities, a landscaping and irrigation system, docking facilities, parking areas, and access roads. The overall objectives of the City of Kissimmee are to upgrade 5,600 linear feet of shoreline adjacent to Lake Tohopekaliga, to conserve the lake through appropriate development in a fast growing, high visitation county, and to meet the demands from an expected 60% increase in tourism by 1985.

JUSTIFICATION: The project would help secure, through appropriate development, a section of urbanized shoreline for perpetual public use. It would provide facilities for boaters and fishermen. Finally, the project would preempt pressures for less appropriate development of the lakeshore frontage. The City of Kissimmee has already expended approximately $60,000 (excluding land acquisition) of its funds and $50,000 of grant funds from the Florida Department of Natural Resources on the overall project. Replacement costs for all existing lakeshore improvements are estimated to be three to four million dollars. Funds requested would be allocated through the discretionary funds of the Chief of Engineers for Code 710 Recreation Projects.

APPENDIX A

Resolution by the Governor and Cabinet
Cross Florida Barge Canal

RESOLUTION

WHEREAS, the Governor and Cabinet of Florida, sitting as Head of the Department of Natural Resources, on August 1, 1972, rescinded their previous policy supporting completion of the Cross Florida Barge Canal through the Oklawaha River Valley and on that date suspended their support of this project until such time as:

1. A new benefit-cost ratio study, which includes up-to-date interest rates and construction costs and re-evaluation of recreational benefits, is completed and demonstrates to the satisfaction of the State that this is a wise expenditure of taxpayers funds.

2. An environmental impact statement, as required by Section 102 of the National Environmental Policy Act, is completed and available to the State for final evaluation as to the environmental effects of the Canal.

WHEREAS, restudy documents were prepared and released by the U. S. Corps of Engineers in the summer of 1976 and did contain a draft environmental impact statement and a benefit/cost ratio study displaying up-to-date interest rates which were additionally updated in December 1976; and

WHEREAS, the Governor and Cabinet of Florida, sitting as the Head of the Department of Natural Resources, on December 16 and 17, 1976, did consider the restudy documents and take public testimony relative to the Cross Florida Barge Canal;

NOW THEREFORE BE IT RESOLVED THAT:

A. The Governor and Cabinet, sitting as the Head of the Department of Natural Resources, and recognizing the authority of the United States Congress to complete the canal, respectfully:

1. Recommend against completion of the Cross Florida Barge Canal Project.

2. Request the United States Congress to de-authorize the Cross Florida Barge Canal Project.

3. Recommend to the United States Congress that it authorize and appropriate sufficient funds for federal participation in and implementation of the following recommendations:

(a) Establishment of a State-Federal Task Force to study and recommend the best disposition and use of the canal lands with special emphasis on:

(1) Restoration of the Oklawaha River, its designation as a wild and scenic river, and its inclusion in the Ocala National Forest;

(2) Use of other remaining canal lands for public recreational and environmental purposes especially to meet the present and future needs of the canal-area counties; and

(b) Lands previously supplied by the State of Florida to the Federal Government and not necessary for use by the Federal Government for a wild and scenic river system or Ocala National Forest be returned to the State of Florida.

4. Direct the staff of the Department of Natural Resources to coordinate state efforts in an interagency State-Federal Task Force to study and recommend the best disposition and use of the canal lands with special emphasis on restoration of the Oklawaha River, its designation as a wild and scenic river, and its inclusion in the Ocala National Forest.

5. Direct the Division of State Planning of the Department of Administration to study and make specific recommendations for applications to be made by the State of Florida to the United States Congress for funding of sewage treatment construction projects in the State of Florida, for federal impact funds for economically depressed areas, as well as other federal funds which will have an impact on the State of Florida.

B. The Governor and Cabinet, sitting as the Head of the Department of Natural Resources, recommend to the 1977 Florida Legislature that:

1. The responsibilities of the Canal Authority be amended in order to retain public ownership of the lands associated with the project as necessary to accomplish "A" above.

2. Legislation be enacted which will permit appropriate title to be secured for those lands currently held in easement as necessary to accomplish "A" above.

3. Title to the lands associated with the project retained by or returned to an agency of the state be transferred to the Trustees of the Internal Improvement Trust Fund.

4. Chapter 374, Florida Statutes, Part II (Sections 374.301-374.521) be repealed and any funds remaining in the accounts of the Cross Florida Canal Navigation District and not legally obligated, be returned to the counties in the District on a prorata basis, established by the tax monies furnished to the District by these counties.

5. Section 20.25(12), Florida Statutes, be amended to read "The canal authority of the State of Florida, created under part I of Chapter 374, is transferred by a type three transfer tc the Department of Natural Resources and the functions shall be assigned to the Division of Resource Management".

6. All such state lands determined not to be necessary for recreation, wildlife or environmental preservation be sold at public sale to the highest bidder and the funds derived be refunded to the counties involved on a prorata basis in the manner established by the tax monies furnished by these counties for the Cross Florida Canal Navigation District. The total monies refunded to the various counties are to be calculated by converting the actual amount furnished to its present dollar value giving the effect of interest charged at average market rates being compounded annually over the total period of financial commitment. Should the funds so derived be in excess, any surplus will be returned to the different counties on a prorata basis. Should the funds so derived be insufficient, the Governor and Cabinet, sitting

as Head of the Department of Natural Resources, recommend to the Florida Legislature that they appropriate sufficient funds to fulfill this obligation.

C. The Governor and Cabinet, sitting as Head of the Department of Natural Resources, direct the staff of the Department of Natural Resources, upon approval and implementation of "B.5", to prepare any additional legislative recommendations for use or disposition of resources and facilities of the project consistent with the above recommendations.

DONE AND EXECUTED at Tallahassee, Florida, this 17th day of January, 1977, A. D.

Reubin O'D Askew
Governor

Bruce A. Smathers
Secretary of State

Robert L. Shevin
Attorney General

Gerald A. Lewis
Comptroller

Bill Gunter
Treasurer

Commissioner of Agriculture

Ralph D. Turlington
Commissioner of Education

ATTEST:

Mary C. Nonah
Secretary

As and Constituting the Head of the State of Florida Department of Natural Resources.

CANAVERAL HARBOR, FLA.

STATEMENT OF HON. BILL NELSON, U.S. REPRESENTATIVE FROM FLORIDA

Senator HUDDLESTON. Congressman Nelson is here; please proceed.

Mr. NELSON. Mr. Chairman, I come from a part of the country that is near and dear to your heart. It has got a lot of steam at the Kennedy Space Center.

I am submitting a written statement for the record, and would just call your attention in that packet they just pointed out to a photograph in that packet. This is a photograph of Port Canaveral of which the dark water at the bottom is the Atlantic, then with the new Trident submarine turning basin that has been dredged to a depth of 45 feet to accommodate Trident submarines. Going further to the west toward the top of the photograph, there are more military docks in there as we have an increasing military role at Port Canaveral. Further, the lighter blue body of port before you get into the Banana River, which is the subject of my testimony, the Corps of Engineers in their proposal on spending for fiscal 1982 have within their capability $100,000 for planning for the last and top most portion in the photograph of the port, which presently has an average depth of about 16 feet and of which they need to have it ultimately dredged to 31 feet. The rest of the port is at 35 feet except the Trident submarine turning basin, which is at 45 feet.

So the Corps will be requesting in their package to you $100,000 for fiscal year 1982, and fiscal year 1983, $100,000 for planning again for this project and construction money for the dredging to take place in fiscal year 1984 and 1985, and it is on that behalf that I am here speaking on behalf of my port, not only on behalf of the commercial activity of the port, but the increasing military role that the port is playing.

Because of the increased business by military ships, it is severely crowding the commercial facilities there at the port. There is an immensely expanded role for the port in the future—commercial expansion—not the least of which is the distribution of coal internationally into Florida as we try to wean ourselves from foreign oil in the burning of our electrical utility companies. This port will be one of the main distribution points for that coal in the future, and it is for that reason that the time frame of fiscal year 1984 and 1985 we need that deepening done, and the planning money, about $100,000—not $100 million, not $100 billion, but $100,000—in fiscal year 1982.

Thank you for the opportunity to come in and make this statement.

Senator HUDDLESTON. Thank you, Congressman, and your full statement in its entirety will be included in the record.

[The statement follows:]

STATEMENT OF REPRESENTATIVE BILL NELSON

CANAVERAL HARBOR PROJECT

Port Canaveral is a man made port on the Central East Coast of Florida created in the early 1950s primarily for the regional export of citrus and fresh produce and the harvest of seafood. Although the port has never reached its full potential for citrus, it has become an important energy port providing facilities for low cost ocean transportation of bunker fuel for the areas' electric power plants and for the import and export of bulk commodities such as cement, newsprint, salt, citrus, concentrate, frozen fish, and scrap metal.

Soon after the port was created the federal government condemned the northern half of the port for military use in support of the Nation's missile, and later space programs. By the early 1960s it was apparent that the port would soon outgrow the remaining area for commercial operations, and Senate Bill 140/87/2 of October 23, 1962 authorized relocation of the dike between the Port and the Banana River to provide for an additional 31 foot deep ship channel and turning basin, as well as for locks between the port and the channel in the Banana River leading to the intracoastal waterway. Due to fund limitations, the western turning basin was only partially constructed by outlining it with a dike, bulkheading the north and east sides of the basin, and dredging it to 16 feet for use by fishing boats and small craft. The channel between the central and west turning basin was also left unfinished until such time as the central basin and related channels were fully utilized.

In 1973, the port entered upon an expansion program which completed the bulkheading and installation of piers in the central turning basin and part of the channel leading to the western turning basin. By 1979, the Port Authority had a total of five (5) general purpose berths and three (3) tanker or bulk berths which fully utilized all of the previously developed portions of the harbor.

The Port Authority requested funding for the completion of the previously approved Canaveral Harbor Project for inclusion in the Corps of Engineers budgets for FY 80, 81 and 82, but so far, the project has not been funded. The Corps of Engineers have stated that appropriations of $100,000 are needed in the FY 82 budget for preliminary engineering, another $100,000 in FY 83 for specifications and design, and about $8 million split between FY 84 and FY 85 for the completion of the project. The Canaveral Port Authority will provide approximately $8 million for spoil dike, bulkheading, moving utilities, and pier construction, and more in constructing roads, warehouses, and terminals ashore. Part of the construction ashore will be by private enterprise.

In March 1981 all piers are fully utilized or committed to projects under development and there is no room for expansion of deep draft ship operations. Approximately 2,000 people earn their living from port related industries, and residents of five (5) adjacent counties benefit from the low cost of ocean transportation of goods that ultimately become consumer products. The area is also benefiting from the growing cruise ship business which brings an ever increasing number of tourists, many foreign, through Port Canaveral to the Central Florida attractions. The Port's business is growing fast with the unprecedented growth of the Central Florida region.

Projects under development are additional general cargo facilities, a berth for loading up to 500,000 tons a year of citrus pellet cattle feed for transportation from Central Florida to Northern Europe, roll on/roll off operations for commerce with the Bahamas, and a coal terminal for the economic import of domestic coal to replace foreign oil used by the areas' electric utilities. If the Canaveral Harbor Project is not funded immediately, some or all of this growth will be delayed or lost entirely. With completion of the project, the Port will gain berthing space for ships along nearly 7,000 feet of bulkhead, ultimately more than doubling the space usable for deep draft ships.

The Port is a major stabilizing influence which helps to offset the cyclical nature of the space and missile industries which tends to dominate the local area and its growth is an important step toward stabilizing employment.

It if of major significance to point out that the Port is in fact a multi-use facility, i.e., commercial and military. As previously stated, the northern half of the Port was condemned by the Federal government in support of the nation's missile programs and is presently supporting the Poseidon and Trident weapons system testing programs.

The U.S. Army also operates a joint terminal facility in the Port which exports over 50,000 tons of cargo annually for the total logistical support of a number of U.S. Air Force missile tracking stations and U.S. Navy facilities in the Bahamas and Caribbean. The Army also regularly uses the commercial piers in Port Canaveral to load out large ships with logistical support material for the Air Force and NASA bases on Ascension Island in the South Atlantic. Due to the tempo of military operations in the Port an overflow of from one to three military ships are frequently docked at the Port Authority's commercial facilities. The rapidly increasing commercial use of the Port is threatening the ability of the Port to continue meeting the military demand for berths at commercial piers as well as limiting the growth of commercial business.

It is obvious that this dual purpose and multi use facility must be expanded as soon as possible to accommodate increased demand for berthing space by both commercial and military ships. If this item is included in the 1982 budget as requested, it will still not be completed until 1985 and any further delay in funding would create serious consequences.

ADDITIONAL PREPARED STATEMENT

Senator HUDDLESTON. Senator Chiles has also asked that the statement of the Southwest Florida Water Management District be made part of the record.

Without objection, that statement will be included at this point.

[The statement follows:]

LETTER FROM SENATOR CHILES

APRIL 2, 1981.

Hon. MARK HATFIELD,
Chairman, Senator Appropriations Subcommittee on Energy and Water Development, Washington, D.C.

DEAR MR. CHAIRMAN: On behalf of the executive director of the Southwest Florida Water Management District I would like to ask that the enclosed statement on the Four River basin project in Florida be incorporated in the permanent hearing record, along with other testimony delivered in support of Florida's public works program on March 26.

I appreciate your attention to this request.

Most sincerely,

LAWTON CHILES.

STATEMENT OF THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

The Four River basins, Fla., project is a vital flood control project located in southwest Florida. The local sponsor is requesting $1.9 million for additional construction within the Lower Hillsborough flood detention area. To date, a total of approximately $80 million from Federal, State, and local sources has been invested in the Tampa bypass canal/Lower Hillsborough system for flood control purposes. For the first time in 19 years, completion of construction on this segment of the project is in sight. A $1.9 million appropriation in fiscal year 1982 would allow the Southwest Florida Water Management District, in cooperation with the Corps of Engineers, to begin construction on multiuse facilities within the 16,000 acres of public ownership—all acquired by local interests—that comprise the Lower Hillsborough flood detention area.

Plans have been prepared and construction costs estimated at $7.2 million over a 3- to 5-year period that would make these public lands available for a variety of uses by the citizenry of the rapidly growing Tampa Bay area—located less than 10 miles away—while preserving the project's primary purpose of flood control. Ranger residences have already been constructed by the local sponsor and the board of commissioners of Hillsborough County has formally committed to assume operation and maintenance responsibilities for the multiuse facilities.

Four River Basins—Fiscal year 1982 funding status

Amount requested	$1,900,000
Corps capability	1,900,000
President Carter's budget	1,900,000
President Reagan's budget	1,500,000

NEW YORK HARBOR NAVIGATION PROJECT

STATEMENT OF ANTHONY TOZZOLI, DIRECTOR, PORT DEPARTMENT, PORT AUTHORITY OF NEW YORK AND NEW JERSEY

ACCOMPANIED BY JOE BURGESS

Senator HUDDLESTON. Our next witness will be Mr. Anthony Tozzoli.

Mr. TOZZOLI. Senator, I thank you for giving me the opportunity to present the views of the Port Authority of New York and New Jersey before this subcommittee. I would like to introduce Mr. Joe Burgess, my assistant.

The statement as presented is not only on my behalf, but also on behalf of Linda Seale, commissioner of ports and terminals for the city of New York, and it also represents the views of some 29 maritime organizations and civic organizations in our region.

FUNDING REQUEST

I will be very brief in that the budget as proposed, the Federal budget, has a recommendation for expenditures to channel improvements for New York Harbor of some $18.5 million. The administration has reduced that recommendation very, very sightly in two of the study areas. One is for the Claremont Channel, Jersey City, which is a reduction of $50,000 from revenue at $100,000, and also the Howland Hook study in which $100,000 is removed from a $500,000 request. Those are relatively minor amounts. In our request for the moneys we need for our harbors, we are asking for an additional $10.5 million above the recommended appropriation. Of that amount, $7 million falls in the general category of maintaining existing channels and bringing them down to depth. These are channels that have silted more than was originally anticipated and that $7 million, if it were added to the budget, would give us the needed depths we need in these channels that are very highly used. Of the remaining $3.5 million, the biggest item, and one I would particularly address, is we are asking for an appropriation of $3 million for the Corps to proceed with a study of deepening of our main channels, the Ambrose Channel particularly, which is the main channel into New York from its present depth of 40 feet to 60 feet. The purpose of that is we have undertaken a study and it is presently going on and will be concluded shortly, that would indicate New York has an excellent opportunity of sharing in the promise of export coal trade that many of us know about, and many of the ports throughout the country are looking to have their harbors deepened so the larger ships that will be handling the coal in the future will be accommodated. The principal thing we find in the study is everybody is well aware that expenses and costs these days are a primary consideration. And New York being a very, very natural harbor and very, very close to deep water in the ocean, our preliminary estimates are that we can provide a channel of approximately 60-foot depth for somewhere in the range of $140 million. That is substantially lower than many other ports. I think it would be a good investment. Railroad access looks good and the feasibility of New York becoming a major harbor is a distinct possibility. The study is presently authorized and we are asking for $3 million to fund this. The principle would be because it is a question of just how fast you can get the deep water into the harbor, and the $3 million is a lot of money, but we intend to push the Corps of Engineers very, very hard in getting this study done as quickly as possible.

Thank you.

NEW YORK HARBOR, AMBROSE AND ANCHORAGE CHANNEL

Senator HUDDLESTON. What would the study include, any engineering or design, or are you just studying the feasibility?

Mr. TOZZOLI. The Corps of Engineers would do a feasibility study for the deepening of the harbor which would include cost-benefit ratios, the viability of the project, and also confirm what the costs would be. Our estimate is $140 million.

Senator HUDDLESTON. Environmental impacts and that sort of thing, would that be included?

Mr. TOZZOLI. Yes.

Senator HUDDLESTON. It seems like a lot of money to find out something you think you ought to do.

Mr. TOZZOLI. That is the procedure the Corps has to go through.

Senator HUDDLESTON. I understand.

Mr. TOZZOLI. And this will, I would hope, provide almost the complete amount of money that would be needed for study. We were looking to get the study done in 18 months.

Senator HUDDLESTON. What are your on-shore facilities as far as space is concerned for coal marshaling?

Mr. TOZZOLI. The study that is underway has identified at least three sites that could be used for facilities. The study is now trying to narrow down which of those sites is the most cost effective.

Senator HUDDLESTON. You piqued the interest of this member of the subcommittee when you talk about coal exports. Thank you very much.

Mr. TOZZOLI. Thank you.

[The statement follows:]

STATEMENT OF ANTHONY J. TOZZOLI, DIRECTOR, PORT DEPARTMENT, PORT AUTHORITY OF NEW YORK AND NEW JERSEY, AND LINDA W. SEALE, COMMISSIONER OF PORTS AND TERMINALS, NEW YORK CITY

Representing also:

Maritime & Port Organizations

Board of Commissioners of Pilots of the State of New Jersey
International Longshoremen's Association
Local 333, United Marine Division - ILA, AFL-CIO
Maritime Association of the Port of New York
Maritime Port Council of Greater New York and Vicinity
New York City Port Council on Promotion and Development
New York-New Jersey Port Promotion Association
New York Shipping Association
New York Towboat and Harbor Carriers Association
United New Jersey Sandy Hook Pilots Benevolent Association
United New York Sandy Hook Pilots Benevolent Association

Civic Organizations

Brooklyn Chamber of Commerce
Commerce and Industry Association of Northern New Jersey
Chamber of Commerce of the Borough of Queens
City of Newark (N.J.)
Department of Environmental Protection, State of New Jersey
Eastern Union County Chamber of Commerce (N.J.)
Greater Newark Chamber of Commerce & Industry
Hudson County Chamber of Commerce and Industry (N.J.)
Jersey City Division of Planning
New Jersey Alliance For Action
New Jersey Citizens Transportation Council
New Jersey Industrial Development Association
New Jersey State Chamber of Commerce
New York Board of Trade
New York Chamber of Commerce and Industry
Staten Island Chamber of Commerce
Union County Planning Board (N.J.)
West Side Association of Commerce in the City of New York, Inc.

I am Anthony J. Tozzoli, Director, Port Department of the Port Authority of New York and New Jersey. I am joined by Commissioner Linda W. Seale of the City of New York Department of Ports and Terminals. Together we share the responsibility of also representing the 29 port, maritime, and civic interests listed on the cover of this statement in urging that Federal funds be appropriated in Fiscal Year 1982 for essential navigation and related projects in the Port of New York and New Jersey under the jurisdiction of the Civil Works Program of the U. S. Army Corps of Engineers. We appreciate the opportunity to present our views and recommendations on these matters to the distinguished members of this Subcommittee.

Summary of Recommendations

Port of New York and New Jersey interests recommend the provision of $29,090,000 in federal funds in Fiscal Year 1982, allocated among the following projects, as compared to Federal Budget allotment of $18,590,000 (I will omit citing these individual projects in the interests of time and submit them for the record):

	Funding Recommendation	
Study Category	Federal Budget	Local Interests
Ambrose and Anchorage Channels, NY	None	$ 3,000,000
Arthur Kill Channel Howland Hook Terminal, NY	$ ~~150,000~~ 132,000	150,000
New York Harbor Deep Draft Channel to Claremont Terminal, NY & NJ	~~100,000~~ 50,000	100,000
Construction Category		
Kill Van Kull and Newark Bay Channels, NY & NJ	None	500,000
New York Harbor Collection and Removal of Drift Project, NY & NJ (Waterfront Cleanup)	2,300,000	2,300,000
Maintenance Category		
New York and New Jersey Channels, NY & NJ (Perth Amboy Anchorage)	2,088,000	7,088,000
Newark Bay, Hackensack, and Passaic Rivers, NJ	539,000	1,039,000
Flushing Bay & Creek, NY	$ 1,755,000	$ 1,755,000
New York Harbor, NY (Sandy Hook Channel)	3,054,000	4,554,000
Other Port District Maintenance Projects	8,604,000	8,604,000
TOTAL	$18,590,000	$29,090,000

These recommendations exceed the Federal Budget allotment by $10,500,000 for one study, one construction, and three maintenance projects. The remainder of my statement will elaborate on certain of the listed projects.

Ambrose and Anchorage Channels, New York

In December, 1980, a Senate Committee on Environment and Public Works resolution authorized a study to determine whether any modifications are advisable, including enlargement and deepening to a depth of 60 feet for the Ambrose and Anchorage Channels, New York. These federal waterways have a project depth of 45 feet mean low water and function primarily as the main access channel to the Port of New York and New Jersey. This critically needed deepening study will serve a proposed coal-handling and storage facility in the Port for the domestic and international steam coal market.

The Port Authority is studying the feasibility of constructing a modern coal facility to transload 10-20 million tons of steam coal from railcars to vessels. The coal would be destined primarily for buyers in Western Europe and utilities in the U. S. Northeast. Preliminary study findings indicate that overseas export steam coal demand, which increased from 300,000 tons in 1978 to 16,000,000 tons in 1980, will continue to escalate to an additional 200,000,000 tons by the turn of the century, thus, generating the need for additional U. S. loading facilities and ports. The economic advantages of the large 150,000 ton coal-carrying vessels that are required by overseas coal buyers would make the New York-New Jersey Port a highly competitive port on the East and Gulf Coasts to serve the European market. The required channel deepening necessary to serve these large vessels is especially cost effective in the New York-New Jersey harbor, and the presence of clean dredged material poses minimum disposal problems. Moreover, New York is closer to Western Europe by one to four days than any other East Coast or Gulf port.

However, for any U. S. port to capture a share of the international coal market, deep channel and facility construction within the next five years is essential. Thus, Congress, which is currently drafting legislation to expedite coal channel dredging projects by the Corps of Engineers, recognizes this fact. Our request for a $3,000,000 appropriation to allow the Corps to complete both a pre-authorization and advanced engineering and design report in Fiscal Year 1982 fits in with such Congressional actions.

The Federal Budget contains no funds for this study project, as the Senate resolution was adopted too late for inclusion of such funds. We, therefore, strongly urge a total of $3,000,000 be provided to assure that the expanded share of the world coal market is not a lost opportunity to both the U. S. coal mining industry and the Port of New York and New Jersey.

Kill Van Kull and Newark Bay Channels

In June, 1972, a critically needed study of a deepening and selective widening of the Kill Van Kull and Newark Bay Channels was authorized by resolution of the House Committee on Public Works. This Federal waterway functions primarily as an access channel to the general cargo-container terminals at Elizabeth and Port Newark on Newark Bay, as well as oil terminals. The 2,200-acre Port Newark and Elizabeth seaport complex, a $400 million development with an annual payroll in excess of $109 million, handled more than 13 million tons of cargo in 1980.

The New York District and North Atlantic Division, Corps of Engineers, have completed their feasibility study of navigation channel improvements and have recommended Federal participation in a plan of improvement for the Kill Van Kull and Newark Bay waterways. This plan provides for deepening the existing 35-foot channel to 44 feet below mean low water, and for the easing of selected bends. The selected plan of improvement has an impressive benefit-cost ratio of 8:1 and is the Corps' National Economic Development Plan and Least Environmentally Damaging Plan.

No funds are included in the Federal Budget for this project. However, we anticipate that the Corps' feasibility report will shortly be transmitted to Congress for authorization of construction. In order to expedite this nine-year-old project, $500,000 is required for advanced engineering and design work in Fiscal Year 1982. We, therefore, urge that a total of $500,000 be provided to avoid further delays to this recommended channel improvement.

Other Navigation Projects

As was indicated in the opening portion of this statement, local interests are also concerned with the adequate maintenance of Federal navigation channels in the Port. Recent Corps of Engineers channel condition surveys have determined that shoaling has occurred in some channels in the range of two to six feet above the authorized project depth.

One maintenance problem concerns the New York and New Jersey Channels, New York and New Jersey (Perth Amboy Anchorage) project, specifically, the shoaling of the Perth Amboy Anchorage in the range of six feet above the authorized project depth of 37 feet at mean low water. Maintenance dredging of the Anchorage is required for the loading of deep draft vessels from barges for approximately 2 million tons of export coal annually. While the Federal Budget provides $2,088,000 for maintenance work on the 30-mile waterway, an additional $5,000,000 is needed to provide full restoration of the authorized project depth in the Anchorage area. Therefore, we strongly urge a total appropriation of $7,088,000 for this project.

A Corps of Engineers' condition survey of the Newark Bay, Hackensack, and Passaic River project determined that the lower portion of the Passaic River's authorized project depth of 30 feet mean low water has shoaled to less than 23 feet. This area of the Passaic River is used for the delivery of fuel oil for home heating use. While the Federal Budget provides $539,000 for this project, recent Corps channel surveys indicate an additional $500,000 is needed to restore the authorized project depth in this channel. We, therefore, urge a total appropriation of $1,039,000.

Port interests are also anxious to retain the Federal budgeted funds of $100,000 for the study, New York Harbor Deep Draft Channel to Claremont Terminal, as this will permit the Corps to continue their investigations into the feasibility of navigation improvements for the channel serving Claremont Terminal and Caven Point. The Channel is presently about 25 feet deep at mean low water and offers water access to and is presently used for ocean exports of scrap metal. In addition, the Budget appropriation of $1,755,000 for maintenance dredging is urgently needed to remove shoaling ing in the Flushing Bay and Creek project. This federal waterway has a project depth of 15 feet mean low water and serves sand, gravel, and petroleum barge terminals. While I have not specified them by name, we are pleased that Budgeted funds totaling $8,604,000 have been provided for seven other Port District Maintenance Projects. We urge that these be retained so that the Port of New York and New Jersey can continue to be an economic asset for the region and the nation. I will now ask Commissioner Seale to elaborate on the balance of our funding recommendations for other federal navigation projects in the port.

* * * *

Thank you, Mr. Tozzoli. I am Linda W. Seale, Commissioner of Ports and Terminals, City of New York. I wish to add my appreciation for extending to me the privilege of conveying to you the joint recommendations of the City of New York and the Port Authority for federal navigation improvements in the Port of New York. Before I discuss the other navigation projects in our Region's recommendations, I want to wholeheartedly endorse the funding recommendations expressed by Mr. Tozzoli, in particular, the $3,000,000 appropriation necessary for the Corps of Engineers to study the deepening of the Ambrose and Anchorage Channels. The City is conducting a coal facility study in cooperation with and parallel to the study being undertaken by the Port Authority. However, the major critical issue that must be addressed before we can determine facility location and capital investment requirements or make long-term contract commitments is the timely evaluation and approval of the construction of a deepwater navigation channel. Therefore, an appropriation of $3,000,000 by this Subcommittee will provide the opportunity necessary for us to establish a modern, efficient coal terminal in the Port of New York and New Jersey.

Arthur Kill Channel, Howland Hook Marine Terminal, New York

I would like to discuss three additional concerns of ours; first, the Arthur Kill Channel, Howland Hook Marine Terminal project. This study was authorized under a resolution of the House Committee on Public Works and Transportation adopted May, 1979. This navigation study will evaluate the feasibility of deepening and widening the existing federal navigation project - "New York and New Jersey Channels" - from deep water in Upper New York Harbor generally westward to the vicinity of Howland Hook Marine Terminal, Staten Island, New York. The study also explores the benefits of creating a turning basin of appropriate depth to serve this facility.

This study was initiated in January, 1980, and has progressed toward the end of the first stage of the Corps of Engineers' planning process known as the preparation of the Plan of Study. The study, to date, has determined that the existing channel depth is insufficient, that the existing alignment and width of the channel, particularly at the bends, present hazardous maneuvering conditions for vessels, and that a need exists to evaluate alternative plans of improvement to accommodate commercial navigation. Thus, shipping safety and the economic benefits to be achieved require channel improvements to service this $100 million, 200-acre ocean terminal.

We request that the $150,000 appropriation in the Federal Budget be retained so that the Corps can continue its investigations of the study area's navigation problems.

New York Harbor Collection and Removal of Drift Project, New York and New Jersey

Our second concern deals with the New York Harbor Collection and Removal of Drift Project. We wish to take this opportunity to thank Congress for the success of this project in the Port of New York and New Jersey. Due to adequate federal funding, Liberty State Park and Manhattan's East River waterfronts are being revitalized for redevelopment, while at the same time eliminating major sources of drift material.

The budgeted sum of $2,300,000 must be retained to assure the continuation of cleanup work for the Drift Project in Fiscal Year 1982.

New York Harbor, New York (Sandy Hook Channel)

Our last concern deals with adequate funding for channel maintenance dredging in New York Harbor, New York (Sandy Hook Channel). Sandy Hook Channel serves as the lead entrance waterway to the Main Ship Channel and New York and New Jersey Channels of the harbor. This channel serves the Port's major petroleum refinery and terminal complex located on the Arthur Kill. Recent condition surveys have determined additional shoaling above the prescribed 35-foot-deep project depth. This shoaling results in additional ship delays, increased expenses, and greater risks of oil spills. We urge a total appropriation of $4,554,000 compared to the $3,054,000 allocated for this project to restore the authorized project depth in this channel.

I want to conclude our joint presentation by assuring you that we have attempted, whenever possible, to keep our appropriation requests as low as possible, taking into consideration the need to reduce Federal expenditures. I would like to point out that we are actually urging appropriations of only $3,500,000 more than contained in the Federal Budget, which will be used for one study and one construction project. The additional Federal Budget recommendation of $7,000,000 is for maintaining prescribed channel depths for the Port of New York and New Jersey. Proper channel maintenance is not only prescribed by law, but is an important investment that maintains the efficiency and productivity of both capital and labor, helps in the fight against inflation, and benefits the commerce of our nation.

We hope that the Committee will view our recommendations in this light.

Thank you.

DELAWARE BAY AND RIVER NAVIGATION PROJECTS

STATEMENT OF CAPT. PAUL LANE IVES, JR., CHAIRMAN, JOINT EXECUTIVE COMMITTEE FOR THE IMPROVEMENT AND DEVELOPMENT OF THE PHILADELPHIA PORT AREA

ACCOMPANIED BY:

LEWIS CASSESE, CONSULTANT TO THE JOINT EXECUTIVE COMMITTEE

WILLIAM HARRISON, SECRETARY-TREASURER, JOINT EXECUTIVE COMMITTEE

JAMES KELLY, DIRECTOR, WORLD TRADE DIVISION, DELAWARE RIVER PORT AUTHORITY

JOHN DIETZ, DIRECTOR OF PUBLIC AFFAIRS, GREATER PHILADELPHIA CHAMBER OF COMMERCE

ACCOMPANIED BY—Continued

CAPT. SAMUEL SCHELLENGER, CHAIRMAN, MARINERS' ADVISORY COMMITTEE
G. FRED DIBONA, JR., PRESIDENT, PHILADELPHIA PORT CORP.
MICHAEL CONROY, ASSISTANT TO THE EXECUTIVE DIRECTOR, SOUTH JERSEY PORT CORP.
CAPT. ROBERT BAILEY, PRESIDENT, PILOTS' ASSOCIATION FOR THE BAY AND RIVER DELAWARE
PHILIP CHAPLES, EXECUTIVE DIRECTOR, PORT OF WILMINGTON
CAPT. HARRY H. ROLANDER

Senator HUDDLESTON. I wonder if we could have Mr. John McGarry and Mr. William Harrison at the same time here on the Delaware projects.

INTRODUCTION OF ASSOCIATES

Mr. IVES. Thank you, Mr. Chairman. My name is Paul Ives. I am chairman of the Joint Executive Committee for the Improvement and Development of the Philadelphia Port Area. I have asked to join me here at the head table, testifying for our tri-State region, representatives from our neighboring cites that make up the committee. On my immediate left Mr. Fred DiBona, president of the Philadelphia Port Corp.; to his left Mr. Philip Chaples, executive director of the Port of Wilmington; to my far left Mr. Michael Conroy, assistant to the director of the South Jersey Port Corp. And Mr. John McGarry, vice president of our sister regoinal port group, the PENJERDEL Council. You will hear from Mr. McGarry who will be testifying in support of our testimony and also on his own behalf.

Also with us we have representatives of the committee I would like to introduce. Mr. Lewis Caccese, professional engineer from Pittsburgh on navigable waterways and consultant to the committee; Mr. William Harrison, secretary-treasurer of the joint executive committee; Mr. James Kelly, director of the world trade division, Delaware River Port Authority; Mr. John Dietz, director of public affairs of the Greater Philadelphia Chamber of Commerce; Capt. Samuel Schellenger, chairman of the Mariners' Advisory Committee; Capt. Robert Bailey, president of the Pilots' Association for the Bay and River Delaware; and Capt. Harry H. Rolander.

I will keep my remarks very brief, Mr. Chairman, as you have requested. We have submited our testimony in the formal form for the committee. I would like to just summarize some of the highlights of our problems in the Delaware Bay and River area and the ports along the river.

The Delaware River begins in New Jersey and proceeds roughly 130 miles in a southerly direction. The river and bay is bordered on the east side by the State of New Jersey for its entire navigable length and is shared equally on the west side by the State of Delaware and the State of Pennsylvania. Since Colonial times, commerce has prospered along this river as a natural waterway and was the lifeblood of our emerging Nation. Several tributaries flow into the Delaware which became centers of major ports—the Christina River and the location of the Port of Wilmington; the Schuylkill River which provides facilities for two major refineries; a half billion dollar grain exporting business; and, of course, the Philadelphia Navy Yard, the last public shipyard in the country which has capability for repair and overhaul of the largest vessels.

The upper river north of Philadelphia flows for approximately 25 or 30 miles to the head of navigation at Trenton, N.J., and the giant United States Steel ferrous works at Morrisville, Pa.; on the New Jersey side of the river, the Port of Camden, N.J., the south Jersey ports, the refineries at Westville, N.J., and Hillsborough. We have seven major oil refineries on the river dependent on deep-laden bulk oil carriers. We have a steel mill which depends on the importation of bulk iron ore in large, deep vessels and the Navy Yard, which is our right arm of national defense.

We feel that the river is important in terms of national defense, is certainly important to the local and to the national economy. Unfortunately, we do not have the natural channels. The channels are required to be dredged frequently.

CHANNEL DEPTH

Senator HUDDLESTON. At what depth do you keep that channel?

Mr. IVES. The main ship channel is authorized to a depth of 40 feet. We have never had a 40-foot channel. The Corps of Engineers, the funds that have been alloted have never been able to make the channels deep enough. The Christina Channel constantly shoals. It is authorized at 35 feet, and shortly after the contractor packs up his equipment the river is down to 30 feet. The Schuylkill River is authorized at 33 feet and frequently is 2 or 3 feet less between periods.

This is the crux of the matter, Mr. Chairman, primarily why we are here today.

I was interested to hear the gentleman ahead of me say New York is looking for a 60-foot channel. Many ports in the country are looking for deeper channels. We are trying to be realistic about this thing, and at the present time we are not talking about 45- or 50-foot channels. We are asking the Corps of Engineers to maintain our channels at their authorized depths, provide advanced maintenance so at no time may the main ship channel be less than 40 feet, the Christina less than 35 feet, and the Schuylkill River less than 33 feet.

We have a study underway to increase the depth of the Schuylkill River to 40 feet.

COAL FACILITIES

The thing that has brought this sharply into focus is the emergence of the Delaware tri-State area as a major coal exporting port. We are on the doorstep of the rich coal fields in West Virginia and Pennsylvania. We have coal facilities. The Commonwealth of Pennsylvania has just invested just under $23 million for modernization of coal facilities. The Port of Wilmington is exporting coal and is modernizing and adding to their facilities. The south Jersey ports are going into the coal business, and the United States Steel mill at Fairless is just about ready to export coal from the entire length of the 130 miles of the Delaware River.

Coal requires large vessels. Coal can only be shipped economically in large, deep-draft vessels. If we cannot safely take 39-foot-draft vessels down the Delaware River, the foreign markets will not do business and this business will be a loss to the local economy and it will be a loss to the Nation, because the other ports have not been able to provide the export capability.

Within a year, we stand ready to triple our coal exports with the facilities on hand or under construction. The only thing standing in our way is the cleaning up of the channels which are already authorized by the Congress. The engineering has been done. It is economically feasible and engineers do have the capability to do it.

At the present time, $25 million has been regularly allocated for this type of allocation in the Delaware River area. We believe that this is not doing the job. The Army Engineers have not been able to keep the channels at their authorized depth with this authorization and we are asking the committee to review this. The Engineers indicate the job could be done for $35 million.

I would like to summarize and conclude by saying that we think this is a good business proposition. Last year alone, not taking into account the payrolls, the taxes, the business aspects, and the recycling of the money in the local economy, it amassed to billions. The Federal Government gets $237 million in customs receipts which are directly attributable to traffic on the Delaware River. We are asking our Government to reinvest only $35 million in this.

Thank you very much. I would be happy to answer any questions you might have.

Senator HUDDLESTON. Thank you, Mr. Ives.

[The statement follows:]

STATEMENT OF PAUL L. IVES, JR., CHAIRMAN, JOINT EXECUTIVE COMMITTEE FOR THE IMPROVEMENT AND DEVELOPMENT OF THE PHILADELPHIA PORT AREA

IDENTIFYING REMARKS

The Joint Executive Committee for the Improvement and Development of the Philadelphia Port Area is port-affairs for twenty-one Delaware Valley civic and trade associations whose names appear at the bottom of this letterhead page. Organized in 1888, this Committee has participated in and promoted all major navigation improvements to the Delaware and Schuylkill Rivers and to the Chesapeake and Delaware Canal. The members pay no dues beyond the nominal amounts needed to cover the Organization's administrative expenses and the Officers serve without compensation.

Our Delaware River Ports, Camden, Philadelphia and Wilmington, identified collectively the Ports of Philadelphia, rank first among East Coast ports in international waterborne commerce. It is the largest petroleum center on the East Coast; it is the largest port area in the United States in terms of import tonnage; it supports a major steelmaking operation; and it contributes to improving the United States trade balance through the export of such commodities as coal, grain, automobiles, chemicals, etc. It has major importance, as well, as the site of the Philadelphia Navy Yard; strategically located 90 miles from the sea at the confluence of the Delaware and Schuylkill Rivers.

When statistics become available for the 1980 calendar year it is estimated that this port complex will have handled over 50 million tons of international cargoes; carried by more than 3,500 merchant ships. This commerce will have generated well over one billion dollars in revenues into the economy of the tri-state Delaware Valley region. It also produced $237 million to the Federal Government in the form of Customs collections.

SUMMARY

The continued viability of the Ports of Philadelphia is being threatened because of inadequate channel maintenance. We are not seeking new projects for deeper channels. Rather, we believe that funding for the preservation of existing facilities and investments needs to take precedence. With this in mind, we ask the Congress to not only provide the Philadelphia District operation and maintenance budget request of $23,743,000 but to also provide budget capability so that channels which have deteriorated may be rehabilitated to their authorized dimensions. We therefore urge that $35,073,000 be appropriated to the Philadelphia District operation and maintenance budget in order to restore channels as detailed in our full testimony.

FULL TESTIMONY

The President's budget provides the U.S. Army Corps of Engineers' Philadelphia District operation and maintenance program with the following amounts for the region's major navigation projects:

Delaware River, Philadelphia to the Sea	$15,967,000
Delaware River, Philadelphia to Trenton	2,089,000
Schuylkill River	791,000
Wilmington Harbor	1,325,000
Chesapeake and Delaware Canal	8,571,000
	$23,743,000

The total appropriation of $23,743,000 will only maintain our channels to their current inadequate depths, thereby threatening the continued viability of our ports. For example, the authorized 40' channel in the Delaware River has not had controlling depths in excess of 38' in the middle half of the channel during all of 1980 and to the present in 1981. The outer portions of the channel have consistently had controlling depths of only 33' during this same period. Similar disparities in authorized depths have existed in the Schuylkill River and Wilmington Harbor. We also call to your attention that the Cooper River project, Camden, New Jersey, has had no maintenance dredging since 1962. This project needs to be restored so that it will be a useful facility to the only commercial shipyard in the Camden area.

A foot depth on the loaded ore or petroleum vessels which frequent our ports has a value of $30,000 per foot of draft. Consequently, a shipper suffers severe penalties by lack of authorized channel depth. Coal exports from the Ports of Camden, Philadelphia and Wilmington are expected to triple within the next year with potential for considerably greater tonnage in the future; thereby producing a most favorable impact on the Nation's balance of payments position. Similarly, the Port presently enjoys an $800 million annual grain export business. This too is expected to increase in future years, providing that our channels are restored to their authorized dimensions.

We believe the funding for preservation of existing facilities and investments needs to take precedence over the development of new projects. With this in mind we urge the Congress to not only provide the Philadelphia District operation and maintenance budget request but to also provide the capability so that channels which have deteriorated may be rehabilitated to their authorized dimensions. We urge that the $23,743,000 budget amount for the Philadelphia Ports Channel be endorsed and that $10,980,000 budget capability be added, to restore our channels to their fully authorized dimensions. Specifically, we urge the following capability be provided in addition to FY 1982 budget items:

Delaware River, Philadelphia to the Sea	
Restoration of authorized depth by:	
Additional Dredging	$3,500,000
Removal of [illegible] Shoal	2,000.000
Additional Disposal Area(P[illegible] Grove)	1,500,000
	7.000.000
Delaware River, Philadelphia to Trenton	
Restoration of Authorized Depth by:	
Additional Dredging	2,600,000
Schuylkill River	
Restoration of Authorized Depth by:	
Additional Dredging	1,300,000
TOTAL	$10,980,000

DELAWARE RIVER, PHILADELPHIA TO THE SEA

Continued maintenance of the 40 foot ship channel, that serves the Ports of the Delaware River - Camden, New Jersey; Philadelphia, Pennsylvania; and Wilmington, Delaware; is essential to continue the economic benefits - over 1 billion dollars annually - which are derived by the Delaware Valley region as a result of the commerce which flows through this port complex.

Seven oil refineries, the largest concentration on the East Coast, are located on the Delaware River. These refineries are supplied with crude petroleum by tankships which transit the Delaware River Ship channel at maximum draft. Approximately 1 million barrels of crude petroleum are brought in daily to the area's refineries. An efficient, fully maintained ship channel, and anchorage facilities, are necessary to assure safe transit of these vessels and to assure an uninterrupted petroleum supply to allow these refineries to operate at peak capacities.

Additionally, we bring to your attention the importance of maintaining the Delaware River ship channel for national defense purposes. The Philadelphia Navy Yard is located approximately ninety miles above the ocean entrance to the Delaware River, at the confluence of the Delaware and Schuylkill Rivers. This key defense facility has taken on added importance with its current work program and the proposed upgrading of our naval fleet.

DELAWARE RIVER, PHILADELPHIA TO TRENTON

During the calendar year 1978, the last year in which waterborne commerce statistics have been made available, records show that 12,158,803 tons of commerce were transported over the Delaware River, Philadelphia to Trenton project. A significant portion of this tonnage involved the importation of iron ore required to serve the U. S. Steel Corporation Fairless Works at Morrisville, Pennsylvania. This plant employs more than 9,000 workers and its continued ability to function in the face of hard foreign competition is dependent on the economic transportation of its raw material, utilizing a fully maintained forty-foot channel on the Delaware River so as to coincide with loading drafts available at the supply source on the Orinoco River in Venezuela.

The channel has an authorized width of 1,000 feet through Philadelphia Harbor to Allegheny Avenue. At Allegheny Avenue the width decreases to 400 feet. This contour reflects a pattern of Port traffic when the Port Richmond Terminal was the only major cargo facility in the northern Port area of Philadelphia.

In 1966, the Philadelphia Port Corporation and other Port interests requested the construction of a turning basin and maneuvering area in the vicinity of the planned Tioga Marine Terminal, just north of Allegheny Avenue. The recommendation was for the continuation of the 1,000 foot wide channel north of Allegheny Avenue for approximately one mile with an enlargement of the width to approximately 1,200 feet - 1,400 feet above the midsection of the extension to provide an adequate area for turning and maneuvering. This turning basin will also accomodate bulk coal carriers when the new coal terminal is constructed at the adjacent Port Richmond Terminal. Equally important, the enlargement would permit safe passage of through traffic.

Only minor construction remains, primarily in the turning basin area. We have repeatedly asked the Federal government to complete the construction and assume maintenance of the maneuvering area and turning basin but this work is not even scheduled. The City of Philadelphia is justly concerned that this $31 million terminal, which was constructed at a cost of $31 million and is now valued at nearly $90 million, is prevented from reaching its full potential because of navigational limitations.

The Tioga Terminal has created a great economic impact. It is estimated that each ton of general cargo generates $38.00 in new economic benefits. The 1,500,000 tons of general cargo anticipated for 1981 will produce $57,000,000 in economic benefits which flow throughout the region. Each new dollar has a multiplier effect as it is spent and respent, thereby creating another $114,000,000 in secondary benefits. In sum total, then, Tioga is responsible for $171,000,000 in economic benefits which would not be obtained in the absence of this modern marine terminal.

SCHUYLKILL RIVER

Full maintenance of the 33 foot channel project is crucial to grain and petroleum terminals located along the navigable channel. This channel is becoming marginal in terms of quantities of grain that can be loaded versus the deeper drafts that can be accommodated at other grain ports. Failure to fully maintain the Schuylkill River's 33 foot channel depth because of insufficient maintenance is proving extremely detrimental to this business.

WILMINGTON HARBOR

The United States Corps of Engineers is charged by congressional mandate to maintain 5,000 feet of the Christina River, serving the Port of Wilmington, at a project depth of 35 feet. During recent years, a marked increase in shoaling, particularly near the confluence with the Delaware River, has been recorded. In November, 1980 for example, this area silted to 21 feet depth and was only recently cleared through the normal dredging cycle. During the last quarter 1980, a loss of revenue totaling over a half million dollars was suffered because of this silt accumulation. Further compounding the problem is the designation, approval and construction of a new dredge spoils area to replace the present area which is at near capacity.

The Port of Wilmington is well into the development of a container handling facility at considerable investment on the part of the State of Delaware and City of Wilmington. A container facility attracts large, deep draft vessels and demands that adequate water levels be maintained. The fact that dangerously low levels have been reached in businesses which have substantial investment in, and depends upon the Port of Wilmington as a means of livelihood. Maintenance dredging of the Christina and Delaware Rivers, on a timely basis and at authorized depths is essential for the protection of over 3,000 jobs, investments totaling several million dollars as well as the economic growth of the community.

The adequate funding of these projects is paramount to its survival as a progressive, responsive and viable port.

CHESAPEAKE AND DELAWARE CANAL

The importance of approving the budget request of $8,620,000 for the Chesapeake and Delaware Canal project is illustrated in the fact that waterborne commerce through this important artery has increased from 10.8 million tons in calendar year 1977 to 15.7 million tons in calendar year 1980; a 50% increase in a four-year period. Improved channel depths have been the significant factor in this increased tonnage.

The Chesapeake and Delaware Canal provides a saving of a day of ship time in moving between Philadelphia and Baltimore, and also represents additional savings in time and mileage for vessels plying between Baltimore and other North Atlantic ports. These savings are particularly meaningful in these times of high fuel costs. A recent study by the Corps of Engineers indicates that the use of the C & C Canal over alternate routes is saving 350,000 barrels of fuel per year.

DELAWARE RIVER DREDGING DISPOSAL STUDY, PENNSYLVANIA, NEW JERSEY AND DELAWARE

The Corps of Engineers has stated that unresolved disposal area problems threaten their ability to maintain our Delaware River ports in the future. Specifically, they have stated that certain areas of the river will be without disposal sites within five years. We appreciate that the Federal Government has recognized this problem and has authorized a $1,400,000 study to find a solution to the disposal area problem. It is most urgent to us that the $250,000 provided in the President's budget for FY 1981 be maintained, as this study must be brought to a conclusion prior to the exhaustion of any of the disposal areas now being utilized.

COOPER RIVER - NEW JERSEY

This project has had no maintenance dredging since 1962. Dredging is particularly needed to serve as an approach to the ship yard in Camden, New Jersey. Camden Ship is the last remaining ship yard in the Philadelphia-Camden area capable of drydocking tugs and harbor craft. It provides a capability for performing ship repair work on the small Navy Craft which is under the repair purview of the Philadelphia Navy Yard. Currently, some harbor craft, tugs, etc. must frequently travel to Baltimore, New York, or Norfolk at additional expense and with the use of additional fuel because of inadequate depths to Camden Ship. It is urged that $310,000 be provided as an "add on" so as to permit this work to be undertaken.

PETTY'S ISLAND BACK CHANNEL

A Public Works resolution was adopted by Congress in 1974 for this project. There continues to be the conviction that this is a worthwhile project. Local interests have made the appropriate commitments in support of the project. The project can assist in revitalizing a distressed urban area. It is requested that Congress direct the Corps to allocate ~~$700,000~~ $70,000 of General Investigation funds for this study.

STATEMENT OF JOHN J. MCGARRY, VICE PRESIDENT, PENJERDEL COUNCIL

Mr. McGARRY. Mr. Chairman, my name is John J. McGarry. I am vice president of the PENJERDEL Council.

I would like to endorse what Captain Ives has said here today.

I have a prepared statement that I would like to put in the record.

I would just like to say the Penjerdel Council is a regional association of commerce, industry, and professionals with membership throughout the tri-State Delaware Valley area. The industry base of the whole Delaware Valley region depends on waterborne commerce, and from this base stems the economic activity that supports the region's economy. The port is responsible for over 100,000 jobs either directly on the waterfront in positions for export or processing imported commodities. These jobs produce port-generated wages and salaries approaching $1 billion. The customs collections in the region attributable to waterborne commerce is over $237 million in 1980.

We would urge the Congress to give particular attention to this problem of inadequate maintenance of existing navigation arteries to their fully authorized project dimensions. Adequate funding for proper maintenance is required. We realize that Congress needs to exercise reasonable fiscal restraint. However, we believe maintenance of the presently authorized channels must take precedence over more drastic new work projects. To do otherwise will contribute to the decay of the existing facilities and the economy of established populated regions where the jobs and business opportunities are so important.

Thank you, Mr. Chairman.

Senator HUDDLESTON. Thank you very much, gentlemen. I appreciate your testimony.

The committee will now take a brief recess.

[A brief recess was taken.]

[The statement follows:]

STATEMENT OF JOHN J. MCGARRY, VICE PRESIDENT, PENJERDEL COUNCIL

FY '82 FUNDING OF NAVIGATION PROJECTS OF INTEREST TO THE PORTS OF PHILADELPHIA.

The PENJERDEL Council is a regional association of commerce, industry and the professions with membership throughout the tri-state, Delaware Valley area. The Council is concerned with the economic welfare of the region, the physical environment of the region, and the provision of adequate energy sources and raw materials for support of job-producing industry toward the objective of an ever-improving quality of life.

The industry base of the whole Delaware Valley region of Pennsylvania, New Jersey and Delaware depends on waterborne commerce and from this base stems the economic activity that supports the region's economy. The port is responsible for over 100,000 jobs either directly on the waterfront or in the industries producing goods for export or processing imported commodities. These jobs produce port-generated wages and salaries approaching one billion dollars. Customs collections in the port attributable to waterborne commerce were over $237,000,000 in 1980.

The economy and health of this region since the 17th century has been significantly related to our ports along the Delaware River. The Federal Government has recognized this and has invested 3/4 billion dollars to date in creating and maintaining these channels. Limited past maintenance has caused these channels to deteriorate so that authorized channel dimensions as no longer a reality. Appended hereto is a record of controlling channels depths extracted from Corps of Engineer Records. It can be seen that less than 5' of authorized channel depth in the Delaware.River routinely exists. Similar situations exist on our other principal projects of Schuylkill River and Wilmington Harbor. This defectiveness imposes reduced loading which has an economic penalty in excess of $30,000 per foot of reduced draft on the large bulk carriers which frequent our channels. The grain facility on the Schuylkill River has developed an export facility which operates at a $500,000,000 per year level. This operation is not only constrained from growth by limited channel depth but is severely penalized in the competitive market by the lack of authorized channel depths.

Philadelphia, with its proximity to the Pennsylvania mine fields is well suited to participate in the coal export trade. The state legislature recently appropriated $24,000,000 to provide additional export coal loading facilities along the Delaware River. The South Jersey Port Corporation has entered the coal export business on the Delaware River during the last year and is now exporting millions of tons of coal annually. Shippers must have the knowledge that a navigation artery such as the Delaware River and its tributaries will be well maintained at all times. They must have confidence that drafts will not be suddenly restricted or the river closed because shoaling has overwhelmed maintenance dredging. A shipper needs reliability of his navigation artery. When he finds a vessel enroute to a Delaware River port must be rerouted because of a suddenly imposed draft restriction, as has happened, he quickly reconsiders whether he should come to a Delaware River Port at all.

We urge Congress to give particular attention to this problem of inadequate maintenance of existing navigation arteries to their fully authorized project dimensions. Adequate funding for proper maintenance is required. We realize that Congress needs to exercise responsible fiscal restraint. However, we believe, maintenance of presently authorized channels must take precedence over more drastic new work projects. To do otherwise, will contribute to the decay of existing facilities and the economy of established populated regions where jobs and business opportunities are so important.

In support of the benefits of full channel maintenance, we wish to point out that as the Corps has improved controlling depths in the Chesapeake and Delaware Canal in the last 4 years, the cargo moving by waterborne carrier has increased from 10,700,000 tons in 1977 to 15,700,000 tons in 1981.

The President's Budget provides $23,473,000 of operation and maintenance funds for the maintenance of the Delaware River, Schuylkill River, Wilmington Harbor and the Chesapeake and Delaware Canal projects.

We are informed by the Corps of Engineers that this amount will merely be sufficient to maintain the present inadequate depths and they need to be furnished additional capability to initiated rehabiltation of deteriorated channels. In view of this, we request that additional capability, in addition to the $23,473,000 in the President's Budget, be provided. Specifically, PENJERDEL recommends that the following dredging items be added:

Delaware River, Philadelphia to Sea	
Maintenance Dredging	$ 3,500,000
Dredging Spot Shoals	2,000,000
Penns Grove Disposal Area	1,500,000
	$ 7,000,000
Delaware River, Philadelphia to Trenton	
Maintenance Dredging	$ 2,680,000
Schuylkill River	
Maintenance Dredging	$ 1,300,000
Total additional	$10,980,000

General Investigations

We understand that $125,000 is provided in the President's Budget for a comprehensive Navigation Study and $365,000 for continuations of the Dredge Disposal Study. We endorse these worthy undertakings. However, we need to point to other areas of concern.

Other Projects

We urge the additional of $310,000 to dredge Cooper River from the Delaware River to State Street in Camden, New Jersey. This project has not been dredged since 1962. It will provide improved accesses to Camden Ship Repairs facility, the only remaining ship yard in the Camden Area and better access for the delivery of fuel to the fuel terminal in Camden.

Tioga Turning Basin was authorized in 1976. No work has been undertaken since that date. This project is necessary to expand the export of coal and other cargo from the Delaware River in the Port Richmond area. The Corps informs that $100,000 is required to perform the preconstruction engineering and design in FY 1982 so that actual work may be initiated in FY 1983. We urge that the Corps of Engineers be instructed to expedite the initiation of construction of this Turning Basin.

O'Neill Unit, Nebr.—Opposition

STATEMENT OF RON KLATASKE, WEST CENTRAL REGIONAL REPRESENTATIVE, NATIONAL AUDUBON SOCIETY

ACCOMPANIED BY PHIL JAMES, NATIONAL AUDUBON SOCIETY

Senator COCHRAN [presiding]. The subcommittee will come to order.

We have as our next witness Mr. Ron Klataske with the National Audubon Society, who is accompanied by Mr. Phil James and Mr. Phil Schreier.

Mr. KLATASKE. On the same project, but appearing separately.

Senator COCHRAN. I see, but they will be testifying individually. Could we have everybody come up at the same time to give the statement and any questions that the committee might have can be directed to you following each of the statements.

Mr. KLATASKE. Thank you, Senator. We appreciate the opportunity to testify this morning.

The National Audubon Society represents approximately 425,000 taxpaying citizens. The society has members and chapters in every State in the Union. I work closely with our members in Nebraska and can assure you they are dedicated to the protection of the natural character of the Niobrara River Valley and to the preservation of the family farms and ranches which are a positive part of the cultural heritage of this unique pastoral area. As a rather new landowner said recently to me about his neighbors, "The people who live along this river are some of the finest people the good Lord ever put on the land."

The National Audubon Society is opposed to the O'Neill project and has been on record in opposition to it for more than 10 years, even before it received congressional authorization. There are many reasons why we cannot support this Federal dam and diversion scheme, and why we are compelled to actively oppose it.

Foremost among these is the fact that the project has been advanced with total disregard for the families who have lifestyles and livelihoods tied to the land along this river. Some families have a legacy of five generations associated with a particular piece of property. They love this beautiful country and they have been good to it. Some will lose their homes if this project is built. As many as 300 may be adversely affected. More than 30,000 acres of private land will be taken by the Water and Power Resources Service.

Yet, these landowners were never given an opportunity to vote in the elections conducted by the reclamation district sponsoring this project. For all practical purposes, they were all gerrymandered out by project promoters who have ignored every standard of fairness and justice we have reason to expect in a democratic society.

I was with a delegation of Niobrara Valley family members last July when a farmwife told the honorable Congresswoman from Nebraska that she felt one of her most precious rights as an American citizen had been denied her on the day of the O'Neill Reclamation District vote. The rights and interests of these good people is being sold down the river. You and other Members of the U.S. Congress should not allow this to happen. It should not be encouraged with further appropriations or an eventual Federal expenditure of $335 million.

The Department of Interior's Water and Power Resources Service should be asked to establish a good-neighbor policy based on the principle that private land should not be condemned without a compelling reason. Since this project does not even make economic sense, there is no compelling reason. Furthermore, it is too costly and too destructive to merit consideration at a time when far more worthy Federal investments are being eliminated. The project will not even contribute in an overall beneficial way to agricultural productivity.

Whereas the O'Neill project would destroy the most spectacular stretch of the Niobrara and drastically degrade downstream flows, farmers along the river have offered a positive alternative. They have requested that two sections of the river totaling 62 miles be designated a national scenic river and protected by the Department of the Interior in partnership with them. A brochure, which gives a newspaper account of the 47-mile landowner proposal announced last May, is provided. This past fall all of the ranch and farm families along an additional 15-mile reach of river downstream joined together in a similar request.

As Representative Douglas Bereuter of Nebraska stated on the House floor last June, "The Niobrara is perhaps the most beautiful and unique river valley in the Great Plains." We urge you to protect it and the integrity of the congressional appropriations process by halting appropriations for the O'Neill unit, and especially, I might add, we urge you not to appropriate any money for condemnation of land or to initiate construction.

Senator COCHRAN. Thank you.

Mr. James, you may go ahead and proceed.

Mr. James. Thank you. I am a resident of Fremont, Nebr. Our business is the formulation and distribution of agricultural chemicals, and we operate primarily in the Western Plains States. As such, I am vitally interested in the development of agricultural resources in the Western Plains States, and particularly in Nebraska. I am sure you are aware agriculture, of course, is Nebraska's largest industry. Sound water resource development is something all Nebraskans can support, but many are increasingly aware that the O'Neill project is the wrong type of water resource development. This project was designed over 20 years ago to irrigate 77,000 acres in an area that at that time was unirrigated. Today, about half of this acreage is already irrigated as a result of private development It is difficult to conceive that a Federal project which will result in a subsidy of over $4,000 an acre can be justified to further this development at this time.

Because many of our State's taxpayers are aware of this, the O'Neill/Nordon Dam project does not have the support of a majority of Nebraskans. A poll conducted by the Omaha Herald in the fall of 1980 indicated that two-thirds of the individuals who were aware of the project were opposed to its completion. The Bureau's most recent supplement to their environmental statement indicates that 80 percent of the existing irrigation can continue without the Norden Dam being constructed. If this is true, it is difficult, as I say, to justify, in effect, a subsidy of over $4,000 an acre to benefit some 200 to 300 landowners.

The Ogallala aquifer High Plains study, which was financed by the Department of Commerce, has released data that indicates many additional acres in Nebraska can be irrigated. This potential development can, and will, be accomplished by private enterprise. Individual landowners, analyzing their own opportunity for profit, will decide whether additional irrigation is economically justified without the need for a Federal subsidy.

The O'Neill unit is presently estimated to cost $335 million. This projection utilizes a discount rate of 3.25 percent to determine the present value of benefits derived. To the extent that the discount rate chosen should bear some resemblance to opportunity costs which are lost, and therefore to current interest rates or estimated interest rates in the foreseeable future, a 3.25-percent rate is totally unrealistic. If a more realistic rate of interest is used to estimate the finance cost of the project, the O'Neill unit would greatly exceed $335 million, or if a more realistic rate were used to determine the present value of future benefits, they would be greatly diminished.

There is the additional matter of who will pay for the project. The landowners in the affected area signed a contract in 1976 to repay $45 million dollars of the estimated $335 million. The cost since 1976 has increased from $163 million to $335 million, with the irrigators still only obligated to repay $45 million. Power users up and down the Missouri River basin are now scheduled to repay $272 million. On an unrealistic estimate of $335 million, power users must bear, as I say, 80 percent of the cost of the project's completion. I find that particularly interesting in light of the fact that in the original legislation authorizing the O'Neill Unit Dam, Congress specifically excluded the development of hydroelectric power for the O'Neill unit. I question whether Congress intended for power users to bear this disproportional share of the project cost. I would suspect that the current proposal goes far beyond congressional intent.

In conclusion, I would urge the abandonment of this project as economically unfeasible in a time when taxpayers in Nebraska and across the country are mandating restraint in spending at all levels of government.

Thank you, sir.

Senator COCHRAN. Thank you very much, Mr. James.

Is Phil Schreier here? He was listed as a possible witness.

Mr. JAMES. No, sir.

Senator COCHRAN. Your testimony is very helpful to the committee. This is a project that has been subject to a great deal of controversy in Nebraska, as I understand, and as your testimony indicates. Hasn't there, likewise, been litigation that has at least put the thing on the shelf for a while? Is that litigation still pending?

Mr. KLATASKE. There is still an injunction by the Federal district court to prevent construction until they finalize their supplement to the environmental impact statement which dealt primarily with alternatives and dam safety. The Water and Power Resources Service agreed this last year that the original design was not safe and would have to substantially increase the size of the dam, costing approximately $100 million more. But the injunction is still holding.

Senator COCHRAN. Are you a party to that litigation at all?

Mr. KLATASKE. No, our organization isn't.

Senator COCHRAN. I was interested in your observations about the fairness of a vote that was taken. Was it in the nature of a referendum among landowners or people who lived in the area? You mentioned one lady told the Congresswoman—I suppose Virginia Smith—that she had been denied the right to vote. Has there been any litigation that has arisen out of such claims of unfairness and illegality?

Mr. KLATASKE. No, there hasn't. The reclamation law in Nebraska that allows formation of reclamation districts essentially permits supporters of projects of this nature to go into one area where they hope to have the irrigation and carve out an area they call a reclamation district. That territory can include a town; in this case it did, the town of O'Neill. In this district, the reclamation is 60 to 80 miles away from the river, and naturally they excluded all the people who have their ranches cut by the canal system, 360 miles of canal system. All of the landowners along the river who would have their land taken for the reservoir, so-called mitigation for wildlife and recreation, they were all excluded, as well as the landowners along the river downstream from the dam which would have the river water taken from them to a very large extent. They would have to fence the river to keep their cattle from crossing. They would lose their benefits of subirrigation and direct irrigation out of the river. That is permitted, strangely enough.

Senator COCHRAN. That is a matter of State law, isn't it, not Federal?

Mr. KLATASKE. Yes.

Senator COCHRAN. Thank you very much for being here. We appreciate your testifying.

HUMBOLDT RIVER AND TRIBUTARIES, NEVADA

STATEMENT OF DAN BILBAO, JR., ELKO COUNTY RECREATION BOARD

ACCOMPANIED BY:
PAUL SAWYER
L. L. (DUTCH) STENOVICH
MARK CHILTON
AMALIO GOMEZ

Senator COCHRAN. The next witness is here to discuss the Humboldt River project in Nevada, Dan Bilbao.

Mr. BILBAO. Thank you, Mr. Chairman.

My name is Dan Bilbao, Jr. I represent the Elko County Recreation Board. This board is the official sponsor of the Humboldt River flood control project and will provide the requirements of local cooperation for the project.

We have with us today a representative group from the Humboldt River basin who, by their presence, wish to impress upon you the importance of this project. Their names and occupations are: Paul Sawyer, motorized equipment leasing agent; L. L. (Dutch) Stenovich, garage owner and automobile dealer; Mark Chilton, engineer; Amalio Gomez, our engineering consultant.

This project was authorized by Congress for construction in 1950. It consisted of three small dams with a combined storage capacity of 250,000 acre-feet. The project had no official sponsor until 1969 when the board we represent agreed to pay the local costs. Ever since 1969, we have been trying to get the project built by the Corps of Engineers.

Needless to say, we have been confronted with numerous delays. However, the Corps has been updating the project for several years, and a report entitled, "Phase I, General Design Memorandum and Environmental Impact Statement," is due in draft form late this year and in final form in 1982.

Due to the effect of economic conditions on the feasibility of two of the dams, the Corps has decided to concentrate its efforts on building only one of the dams—the Hylton Dam on the South Fork of the Humboldt River—for the present. Work on the other two dams will be deferred until such time as the economy makes them more feasible. The Hylton Reservoir capacity will be 120,000 acre-feet. The latest estimate of cost is about $32.3 million. The project will provide flood control, irrigation, recreation, and fish and wildlife enhancement.

The Corps tells us that their capability for fiscal year 1982 is $550,000, a small part of which will be used to wind up the phase I report already described and the balance will be used on phase II of the general design memorandum which is heavily oriented toward the general design of the project, including more detailed geologic explorations and laboratory testing. If the project is not funded for fiscal year 1982, initiation of construction will be postponed 1 more year with a resultant increase in the final cost due to inflation of approximately $3 million.

Our engineering consultant, Mr. Amalio Gomez, has worked with the Corps of Engineers in developing a realistic schedule for completion of this project; and if work can proceed in the coming year as requested, the Corps estimates that actual construction can get underway in 1984 and the project could be completed in 1988.

As authorized, the local share of this project for irrigation is $2,762,000 and the local first cost for recreation facilities is in the order of $2.2 million. The Federal net cost is then about $5 million less than shown in the estimate previously stated.

I might state just briefly that Nevada is an arid State where water has a very high value and where water resources must be utilized to the fullest extent possible in order to meet the needs of the State. Flood control and water storage on the Humboldt River, northern Nevada's principal source of water, will help to bring about utilization of this valuable resource to the fullest. Due to the rapid growth of our State, particularly in the rural areas, there is a rapidly growing demand for use of water in all ways which it is traditionally used. During the 1979–80 irrigation season it is estimated that 110,000 acre-feet of water were wasted due to flood stages which carried the surplus waters on downstream into the Humboldt sink, an arid salt flat. This year, streamflow in the Humboldt is estimated at only 34 percent of normal. If the Hylton Dam were in place now, we could have stored 100,000 acre-feet of water to assist in offsetting this serious water shortage.

We know that the project is not funded in the President's budget, but we ask that you add on an item to the budget so that the planning process is not interrupted and the work already done does not become obsolete and we can maintain our schedule without the danger of being thwarted eventually by increased inflationary costs.

Thank you for allowing me to make this presentation.

Senator COCHRAN. Mr. Bilbao, we appreciate your being here and bringing us up to date on the status of this project. I was looking at last year's hearing record and noticed that there was testimony about the status of the project. You had $300,000 made available to complete the phase I design. Now, as I understand it, the phase I design has not yet been completed; is that correct? That is your understanding.

Mr. BILBAO. Yes.

Senator COCHRAN. And you are asking for additional funds to be allocated to the planning and design phase; is that right?

Mr. BILBAO. Yes, sir.

Senator COCHRAN. But the President didn't put it in his budget.

Mr. BILBAO. That is correct.

Senator COCHRAN. Well, we will take a careful look at it. Your testimony will be helpful to the committee as we review these requests around the country. Let me express our appreciation for your being here and the others you introduced as having an interest in the project. Thank you so much.

Mr. BILBAO. Thank you.

CENTRAL ARIZONA PROJECT

STATEMENT OF FRANK WELSH, EXECUTIVE DIRECTOR, CITIZENS CONCERNED ABOUT THE PROJECT

Senator COCHRAN. Our last witness this morning is Mr. Frank Welsh, who is here to testify concerning the Central Arizona Project.

Mr. Welsh, welcome to the subcommittee. We have a copy of the statement of the Citizens Concerned About the Project, and we will make that a part of the record in full. And we will include, if you would like, which is an article from Fortune magazine and some clippings from other publications that you have appended to your statement. We will make all of that a part of the record and you may proceed.

Mr. WELSH. Thank you, Mr. Chairman, and I will keep my statement brief and just refer to the testimony.

Senator COCHRAN. I have heard a little bit about this project. I haven't been out there to look at it or get a briefing in Arizona, but as a former Member of the House, it seems like this has been around a while and has been discussed and discussed and been the subject of some controversy I know.

Mr. WELSH. Unfortunately, when we get into this in 1973, most Arizonans thought it was the Civil Air Patrol. I represented a citizens' taxpayer group concerned about the high cost of the project when we found we do not need this project. Some may want it, but we don't need it. It is very difficult to convince people that Arizona is going to have plenty of water. However, Arizona has the longest continuous stretch of ponderosa pine forest in this Nation. That water runs by gravity down to Tucson.

The Hudson Institute, Herman Kahn's famous think tank, did a report last year which shows that Arizona's present water supply with CAP can support 25 million people. That is in excess of California, our most populous State. Therefore, CAP, from an economic standpoint, is not worth the investment of $2.2 billion of today's cost.

Dr. Thomas Power in an economic analysis of this project at the 7-percent discount rate, which he says even that is ridiculous and CAP is authorized at 3.25, he came out with a benefit-cost ratio of less than 0.35 to 1. I enclose a letter by Dr. Power to the editor of the Arizona Republic, which shows that delaying the CAP at this time is really more economical than continuing it.

The Fortune magazine article, to which you referred, I think the title speaks for itself—"Ending the Southwest's Water Binge." Fears to the contrary, there's no real shortage yet—and won't be if the price of water is allowed to seek its own level.

I would like to note in this national publication they say in the second colum in the middle:

> The proposed budget for fiscal year 1982 that the Reagan administration inherited contains at least $1 billion for Western water projects—and gives the new President an opportunity to show he is serious about cutting Federal spending.

There is one part of this article that I would like to clarify. On Tuesday, our Governor said that the project was 80 percent completed.

I must note he was talking about just a portion of this project. One-third of the money thus far has been for the Navajo powerplant, $230 million. As Dr. Power shows, that investment is now worth over $500 million. Removing the Navajo powerplant from the economic justification of this project and percent completed—because we can use that energy right now, and we are, we can continue to use it for other more important uses—shows that the CAP is less than 25 percent completed to date.

Now, we recommend stopping this project, or at least delaying it, in light of economic analysis, because if we don't we are looking at spending more and more money. CAP does not have enough water to supply. The upper river basin States don't have enough water, and CAP will take water Los Angeles is presently using. Therefore, what we have is an arrow pointed at the Northwest to bring down more water, and perhaps the ultimate off the Alaska, the Yukon rivers.

We find that the major problem of water in the Southwest is the water-is-different syndrome, laws that are archaic, the refusal to allow the free market to apply to water. We have proposed a solution last year to let the free market apply. Since we are talking about the water Los Angeles is presently using and since we don't need more water for people, why not sell California the water she is presently using. She will have to go up north and bring down more water from the delta peripheral canal than the CAP is using.

A little side note. In Phoenix, water is delivered at $6.50 an acre-foot. If we do sell our water, we would beat the seller theoretically. We would get $200 million a year in the Arizona State treasury. We will save the State and Federal Government $10 billion and maybe $15 billion, hundreds of millions of kilowatts of energy, enough to supply two cities the size of Phoenix.

You will note in another letter that I have submitted that other organizations such as the National Audubon Society have picked up on this proposal and we are just beginning to pick up steam.

ORME DAM

On the Orme Dam, probably the most controversial part of CAP, probably because the Indians and eagles are involved, we are concerned about the economics of this project also. As far as the flood problem in Phoenix goes, we believe that the local government has already solved its problem. If we had adequate bridges across the Salt River in Phoenix, 95 percent would have never known about it. Through efforts we have 12 bridges under construction to carry these flows. Total cost of the local project would be $50 million. Orme Dam's cost is $550 million. We are working with and sponsoring in general the study of Orme Dam alternatives. That is now going on. However, we have major disagreements with some of the methodology. The Federal agencies want to use the maximization of benefits method. We say in today's inflationary era we should go with least cost. The Federal agencies are trying the $65 an acre-foot as valuable addition water. There are at least five independent studies that show additional water is worth $15 an acre-foot. Any way you look at this project, it is a waste of Federal dollars.

Here then is at least one sacred cow that has escaped Mr. Stockman's thundering herd.

I would be happy to answer any questions.

Senator Cochran. Thank you very much for your testimony and bringing this information to the attention of the subcommittee.

Mr. Welsh. I thank you.

Senator Cochran. According to the testimony and information you are submitting to us, the cost of completing the project is what? Is that identified in your testimony, your estimate?

Mr. Welsh. In today's dollars, if we go with the $2.2 billion——

Senator Cochran. That is the total cost?

Mr. Welsh. Right. We have spent something like $640 million as of last September, so roughly we will say $700 million. So the $1.5 billion left to spend, it is estimated when this project is completed, if it ever is, its real cost will be $3.1 billion. That was by the city of Tucson.

I must note that this project will not be repaid by Arizona despite what you may have heard. As the information report shows, the Federal subsidy amounts to $5.4 billion. In addition, this project will cost Arizonans another $5 million. That is roughly three to four times our present State budget.

Senator Cochran. Why are all politicians for it?

Mr. Welsh. I really think it kind of grew like Topsy. This was first conceived around 1920, and Arizona, of course, has perceived it has a water shortage. Because it lives in the desert, there must be a shortage.

Senator Cochran. I remember one of the Congressmen—and I can't remember which one it was—told me that this was one of those projects that you just had to be for out there. People were for it so strongly that you had to be supportive of it.

Mr. Welsh. When we started in 1973, we had a lot of trouble getting 18 people to dare challenge this, each of which got a letter from the Governor saying, "How dare you challenge our sacred cow." We were going at it with the free enterprise method. When convinced we had plenty of water—economics are irrelevant if you think you are going to dry up and blow away—that is the crux. We are getting the thrust finally in the news media.

Senator Cochran. I appreciate your being here and giving us this testimony.

[The statement follows:]

STATEMENT OF FRANK WELSH, EXECUTIVE DIRECTOR, CITIZENS CONCERNED ABOUT THE PROJECT

My name is Frank Welsh, Executive Director of Citizens Concerned About the Project. We fully support President Reagan's plan to fight inflation through massive cuts in the federal budget. We also agree with Federal Reserve Chairman Paul Voelker that the cuts may not go far enough. For years our organization, which is primarily citizen, taxpayer-oriented, has been asking for reduction in spending in the area where we are most familiar. Our special interest is our pocketbook. Unlike other "selfish" interest groups, as the President calls them, who say cut everyone's project but ours, we ask that our special project, the Central Arizona Project (CAP), be cut even more than proposed.

We would prefer across the board cuts in all items, except perhaps defense. It certainly looks bad to substantially reduce funding for the handicapped, school lunches, youth job programs and educational aid while leaving water projects virtually unscathed. The President proposes curbing low interest loans, like 9% for students, while permitting construction to continue without delay on no-interest and low interest water projects, like the 3% CAP.

Here is at least one sacred cow that has escaped from Budget Director David Stockman's "thundering herd." The President's promise to not cut programs for the truly needy is admirable. We ask that you cut funding for a project that is truly unneeded and will be detrimental to the truly needy. Reducing welfare for the poor can surely be questioned when welfare for the rich is not reduced, especially when welfare for the rich will be paid for by the poor. The poor in Arizona will have their water bills and property taxes raised to pay for water they don't need.

Most people have been lead to believe that Arizona has a water shortage and that if the CAP is not completed soon, our cities will dry up and blow away. Nothing could be farther from the truth. Herman Kahn's prestigious Hudson Institute summarized Arizona's water supply in its 1979 report called Arizona Tomorrow:

> If all agricultural water was reallocated to municipal uses in 1970, the state could have supported a population of over 25 million people (compared to an actual 1,775,000 in 1970). Note that this is in 1970, not 2012. Moreover, this scenario does not incorporate the development of new water supplies from the Central Arizona Project or others coming on line after 1970.

Thus Arizona's present water supply can support a population greater than California, our most populous state. Even the mayor of Tucson, purportedly the largest city in the nation totally dependent on groundwater, admitted to this Subcommittee in an April 5, 1978 statement: "I do not intend to indulge in the kind of scare tactics sometimes employed when matters of water projects are discussed. Tucson will not dry up and blow away without the CAP." In a May 1977 report to the city, the consulting engineering firm of Black & Veatch found Tucson's available water supply to be adequate for many centuries, adding that "losses which may result from litigation are relatively small in comparison to available supplies."

The attached article, excerpted from the 2/23/81 issue of Fortune magazine, suggests that it is not water shortages but artificial water pricing due to massive federal subsidization that is the real culprit of the southwest's water problems. It points out that the southwest is only short of cheap water, discusses the waste and mismanagement that is occurring and proposes free market pricing of water as the solution. The removal of federal subsidies should encourage conservation, just as with oil and natural gas decontrol.

An upcoming article in an even more widely read magazine describes our proposal to sell California our CAP water (which she is already using). The attached 1/81 article from the National Audubon Society shows that this idea is catching on, especially as an economic alternative to California's controversial Delta Peripheral Canal. This concept would save the federal, Arizona and California governments billions of tax dollars and billions of kilowatt hours of energy. The simplicity of these solutions is particularly appealing because they utilize the free enterprise system-- that's the American way-- of solving our water problems.

The enclosed letter to the editor (Arizona Republic, 3/7/81) by Dr. Thomas Power presents some additional arguments for reducing or even eliminating funding for the CAP. Dr. Power wrote the definitive report on this project and found the benefit/cost ratio to be less than 0.35 to 1.0. As he points out in his letter, it is foolish to throw good money after bad by continuing to fund this project. As of September 1980, $640 million has been spent on the CAP. Of that, one-third of the cost was used to build the Navajo power plant. If President Reagan halts CAP contruction, this plant will continue to provide energy for Arizonans. Therefore, the aqueduct is less than 25% completed and by stopping the CAP now, we will be saving the 75% that would be wasted.

As for Orme Dam, the most controversial part of the CAP, the alternatives study has come up with several solutions that are less costly and can be accomplished much more quickly. We are concerned that the government seems more interested in spending as many tax dollars as possible rather than solving the flood problem for the lowest cost possible. Hopefully, the new Administration will change this. We also hope the President will maintain his philosophy that local government should solve its own problems. The Arizona local governments have done just that by passing floodplain regulations and building bigger bridges to solve most of the problem. The remaining problem can be solved if the irrigation district/municipality/utility/monopoly known as the Salt River Project will use its six existing dams for flood control as well as storage.

[From Fortune magazine, Feb. 23, 1981]

Ending the Southwest's Water Binge

(By Julia Vitullo-Martin)

To most Americans the semiarid and desert regions of the Southwest evoke sharply contrasting images—the old one of cowboys roaming the dusty terrain in search of waterholes, and the more recent one of verdant new communities whose growth is dizzying even by Sunbelt standards. The whole region, which stretches from western Texas to the southern California coast, seems a threatened paradise, with agriculture, industry, and urbanization fast approaching the limits dictated by scant rainfall.

The statistics sound scary. Arizona claims that its supply of water already falls short of its needs by 2.3 million acre-feet a year; an acre-foot of water, or 326,000 gallons, is enough to cover an acre to a depth of one foot. California is said to have a shortage of three million acre-feet, and West Texas four million.

Yet profligate waste goes on amid all the water worries: gardeners in Beverly Hills hosed down sidewalks during the 1978 drought; farmers routinely use irrigation water far more lavishly than they really need to; desert developments like Arizona's Fountain Hills feature enormous fountains—in this case the world's largest, shooting water skyward at 7,000 gallons a minute. Arizona, the second-fastest-growing state in the country with an estimated population jump of 53% during the Seventies, ranks eighth in the nation in per capita water use.

Billions for dams

The waste goes on because the Southwest's water is underpriced. As FORTUNE said of the entire country 15 years ago ("Water Shortage Is a Frame of Mind," April 1965), the Southwest is not running out of water—it's running low on *cheap* water. The region's problems differ from those of large parts of the Northeast and Midwest currently suffering water shortages; these are a temporary affliction caused by subnormal rainfall in parts of the country that usually get more than they need. In the Southwest, limited rainfall is a permanent condition. But subsidies—mainly from the federal government, which has spent tens of billions on dams and canals—have kept the price artificially low. Because water is priced far below its replacement cost—the cost of providing additional supplies—it is being squandered.

The Southwest's reaction to its artificial water shortage is to cry out for even more federal spending, on projects ranging from the one-third-completed, $2.2-billion Central Arizona Project to a $26-billion dream of bringing water from the Mississippi to western Texas. The proposed budget for fiscal 1982 that the Reagan Administration inherited contains at least $1 billion for western water projects—and gives the new President an opportunity to show he is serious about cutting federal spending. The same opportunity was bungled by Jimmy Carter, who in the early days of his Administration made a "hit list" of water projects, a lot of them in the West, and then bowed to political pressure and allowed many of them to go ahead.

Needed: a water market

New projects could be avoided for years if the price of water were allowed to move toward its replacement cost, which is 50 times what some farmers are currently paying. This would happen if all users whose water supplies exceed their needs were allowed to sell to those who don't have enough. Amazingly, the buying and selling of water is restricted in most of the region, and this encourages those with a surplus to use it wantonly.

Not a penny for interest

One obvious reason is that most of the water comes from projects built years ago, at a fraction of today's costs, by the Water and Power Resources Service (WPRS), the federal agency concerned with western water supplies. But that's far from the whole story. By law, the fees collected by the WPRS, formerly called the Bureau of Reclamation, cover only costs defined as "reimbursable." Under this formula users repay some of the funds advanced to build the projects, but not all. Nor does Washington get a penny of interest on construction funds used in irrigation projects—quite an omission in a time of high interest rates.

The fees do not even cover the government's operating and maintenance costs. Many projects are designed to control floods as well as to supply water, and the law bars WPRS from charging users—even farmers in a flood plain—for any part of a project attributable to flood control. Finally, irrigation water is priced according to the ability of farmers in each area to pay. Small wonder, then, that many federal projects aren't taking in enough to cover even their narrowly defined reimbursable costs. California's Central Valley Project loses $79,000 a day.

At the turn of the century, when Congress passed the Reclamation Act, it made sense for the rest of the country to help underwrite development in the Southwest. The region couldn't be opened up without water, and few private groups had the capital to finance projects themselves. But as the recent economic growth suggests, the region no longer needs favored treatment. Subsidies, moreover, are a needless drain on the federal government when it is running huge deficits. And underpriced water, whether from federal projects or any other source, is bad for the Southwest.

Drip, not ditch

Because water is so cheap, its use is based on its price and not its supposed scarcity. Many farmers, for example, use inferior land to grow low-value crops that require large amounts of water, like alfalfa and sorghum. Similarly, many farmers use cheap, open-ditch systems of irrigation, which use almost six times as much water as the more expensive sprinkler systems, and 100 times as much as drip irrigation, which allocates controlled amounts of water to each plant. The General Accounting Office concluded in a 1976 study that more than 50% of all the country's irrigation water is wasted.

Water-saving irrigation systems require a relatively large capital investment—roughly $1,000 per acre for drip systems—but in the long run, farmers can come out ahead by increasing their yield per acre-foot of water or growing higher-value crops. So long as water is cheap, however, many farmers see little reason to make the switch. As a result, the Southwest's farm economy as a whole is producing less food than it might, and less wealth. The Rand Corp. estimated in 1978 that California alone was losing between $60 million and $370 million annually from the inefficient use of water.

Farmers are not the only careless users of water. The Los Angeles region today bothers to clean up only 60,000 acre-feet a year of its 550,000 acre-feet of potentially reusable wastewater, while insisting that the state build a $1-billion canal to bring south another 600,000 acre-feet from the northern part of the state. Even state governments are wasteful. * * *

The West's extravagant use of water has also reduced water quality to the point that some farmland—including land in California's San Joaquin Delta, one of the most productive agricultural regions in the country—is being poisoned by waterborne salts. State and federal projects take so much fresh water from the delta to send south that its water table has been dropping, permitting ocean water to move farther into the water table from San Francisco Bay. Similarly, the naturally saline Colorado River is so overused by the time it leaves the Southwest and enters Mexico that its water is highly salty—too salty for agricultural use, says Mexico.

Grandfathering the rights

If the Southwest is to avoid a true water shortage from which it might never recover, the waste will have to stop. The way to stop it, as with any limited commodity, is to introduce the discipline of the marketplace.

It is impossible to create a market for water as efficient as the market for pork bellies or Seventh Avenue dresses. For one thing, it would be politically difficult if not illegal to sweep away the great patchwork of water rights granted over the years to farmers, cities, industry, and political jurisdictions. These rights, which in many cases still have decades to run and involve prices ludicrously below replacement costs, would have to be "grandfathered." The only exception might be water from sources that are "overappropriated," most notably the Colorado River. The total claims on this river's water, though never fully exercised, exceed the total flow into the Southwest by at least two million acre-feet and therefore may someday have to be cut across the board.

Any reform of water pricing, therefore, would have to be accompanied by some kind of restraint to keep users from depleting the common groundwater. The water table is falling in at least some sections of all western states. Pima, the county around Tucson that relies entirely on wells, is pumping groundwater five times as fast as nature replenishes it. The Ogallala Aquifer—one of the country's largest underground reservoirs, extending 160,000 square miles under eight states—gets recharged hardly at all. West Texans, who are heavy users, are "mining" its water at the rate of four million to six million acre-feet a year.

Some economists, including William Martin at the University of Arizona, see nothing wrong with using water faster than nature replenishes it. "There's no reason to avoid mining water any more than we avoid mining coal, or copper, or any depletable resource," says Martin. "Economically, resources do us no good just lodging in the ground."

* * *

An obvious buyer

Most economists who push for a free market want to permit users to sell any water they have, conserved surplus and all. Richard Howitt, an economist at the University of California at Davis, suggests that if all California farmers were able to sell the water they didn't need, enough water might be freed up to eliminate the need for more government water projects, at least in the near future. "No one knows," he says, "what farmers would do if they were given clear title to their water and permitted to sell it. But suppose the farmers of the Imperial Valley wanted to sell some of their water—say 300,000 acre-feet. An obvious buyer would be the Metropolitan Water District of Southern California, which has the system in place for transporting the water cheaply. The farmers would make a profit, and the water district would get more water."

* * * * * *

Too good to throw away

Economist Lee Brown of the University of New Mexico argues that full market pricing would induce more southwestern cities to treat waste water, which can then be used for most purposes other than drinking or swimming.

* * * * *

The Southwest's mines require tremendous amounts of water: 25 gallons to produce a pound of copper. Even water at $160 an acre-foot, however, would not put the mining industry out of business. Some companies have already been forced to buy land at up to $2,500 an acre just for the groundwater, and then must pay pumping and delivery costs of $40 to $80 per acre-foot to lift it. Furthermore, mines have the technology to reuse about 30% of their water, and higher prices would induce them to recycle even more than they do now.

But what about agriculture, which uses about 90% of the West's water? Most experts doubt that calamity is in the cards. The University of Arizona's Martin says that without additional water at subsidized prices, 25% of Arizona's acreage would go out of production. But by his estimate, the net value of the farm crop would fall only 12%.

The hand on the spigots

There may be less time for facing up to the Southwest's water problems than is commonly realized. Just to the north, in the states that lie upstream on the Colorado, water usage is rising. The rise could turn into a surge if a lot of shale-oil plants, which consume tremendous quantities of water, get built. If this happens, upstream "donor" states will claim more Colorado River water than they have to date. It is only because of the nonexercise of these claims that the Southwest has been spared a shortage under the present wasteful pricing system.

Even before those shale-oil plants begin to appear to the north, Ronald Reagan may show his hand on water policy in ways that the Southwest may not like. If Reagan's policies in his Sacramento days are any guide, he will finish up construction projects already under way but initiate no new ones. When he was stumping California as a candidate, Reagan applauded water projects, but while he was governor not a single new dam or aqueduct was started. Since Governor Reagan turned down the water spigots, there's no reason to believe that President Reagan will keep them wide open.

[From the Arizona Republic, Mar. 7, 1981]

ARIZONANS SHOULD BITE THE BULLET

Editor:

It probably would be unreasonable to expect consistency from the conservatives whose passion for eliminating federal government spending programs and ending federal government involvement in what are basically state problems helped put Reagan in office and Republicans in control of the Senate.

It is only fair, I suppose to allow conservatives, like liberals, to have their own "legitimate" dependencies upon the federal dole and to scream loudly in anticipation of their pet ox being gored in the orgy of budget cutting they themselves initiated.

But there is some limit to how loose such embarrassed conservatives can be allowed to get with arithmetic and facts. Your recent editorial on the Central Arizona Project certainly has trespassed beyond that limit.

In order to contrive the "fact" that "approximately 70 percent of the federal funds invested in the CAP will be repaid by the people of Arizona," one has to ignore the interest subsidy the nation's taxpayers would give Arizona. In a period of 12 percent inflation and 20 percent interest rates, a 50-year no-interest or 3.34 percent interest loan is as free a lunch as most of us could dream of. If the going interest rate were only 7 percent, the gift to Arizona would amount to $5.5 billion over the repayment period. Assumedly, fiscally responsible people do not wish to simply hide the federal subsidies; they wish to limit or end them.

The $778 million already invested in CAP would not be entirely lost. It includes the $230 million invested early in the last decade in the Navajo power plant at Page. This plant will continue to function, generating relatively low cost electricity at a profit which can easily pay off the remaining costs. That $230 million investment in electric generation is worth approximately $500 million today if one looks at replacement costs. Thus most of the federal investment will not be lost. Besides, a responsible investor, which one would hope conservatives would insist the government be, does not "throw away good money after bad" just because an investment mistake was made earlier. No federal project could ever be ended if that logic was applied to each.

If "every year of delay can add as much as $100 million in inflated costs" to a $2.1 billion project, the project is keeping ahead of the 12 percent inflation rate and its real cost to the taxpayer is declining with each passing year by 7.24 percent! The mere passage of time is not making the project more costly in real terms. Responsible money managers certainly would want to distinguish between real and nominal changes in costs.

If "fiscal restraint" and "evenhandedness" in budget cutting mean anything, CAP will be one of the first casualties of the conservative fight to control the federal government. If it survives, the message to other special interest groups will be clear, and the battle to control the monster we all find on our backs will be lost.

THOMAS MICHAEL POWER,
Professor and chairman, Department of Economics,
University of Montana, Missoula, Mont.

[From Audubon periodical, December–January, 1981]

AN AUDUBON OPINION—MORE WATER, LESS PORK

While sounding like political "double-speak" there may be a way of providing more water to arid Southern California without building additional billion dollar water project boondoggles! Such an intriguing idea has been posed by the Maricopa Audubon Society of Phoenix, Arizona. Their proposed alternative would eliminate the need to divert water from Mono Lake; reverse the dangerous overpumping of Owen's Valley groundwater; make unnecessary the development of the Peripheral Canal and its associated impacts on San Francisco Bay, the delta and north-coast free flowing rivers; and postpone the nightmare time of thirsty Californians looking to the Columbia River for water.

The Arizona Audubon chapter proposes to scrap the Central Arizona Project (CAP) and sell Arizona's future water entitlements for the Colorado River to California. Both the economic and ecological arguments for their plan appear strong.

Why had Maricopa Audubon made such an environmentally-sensitive proposal for California? Because it would keep intact the remnant riparian forests along the Salt and Verde Rivers in Arizona, which provide habitat for the eight remaining pairs of desert-nesting Bald Eagles left in the Southwest.

One of the largest of the pork-barrel water projects in history, the billion dollar CAP was originally authorized under the Reclamation Act which was meant to aid the small family farmer. Paradoxically this "reclamation" project is now being promulgated as a rescue project for two of the most prosperous cities in the nation, Tucson and Phoenix.

By not building the CAP dams and canals and selling Arizona's water entitlement to California there would be sufficient revenue for Arizona to eliminate state property taxes and to develop a trust fund to bring the state's groundwater overdraft into balance and develop effluent reuse and water recycling programs.

SUBCOMMITTEE RECESS

Senator COCHRAN. This concludes the hearing this morning. The committee will resume its hearing at 2 o'clock this afternoon in this room. We stand in recess until that time.

[Whereupon, at 11:10 a.m., the subcommittee was recessed, to reconvene at 2 p.m. the same day.]

(AFTERNOON SESSION, 2:13 P.M., THURSDAY, MARCH 26, 1981)

NONDEPARTMENTAL WITNESSES

HEARING PROCEDURES

Senator SCHMITT [presiding]. The subcommittee will come to order.

In the absence of the chairman of the subcommittee, Senator Hatfield, who is defending the interests of the Appropriations Committee on the floor, I have been asked as a member of the subcommittee to preside over today's session. Senator Hatfield expresses regrets that he cannot be here this afternoon, but I am sure he will examine the testimony with interest.

We have a large number of witnesses this afternoon. Therefore, in accordance with our notification to each of you witnesses, it will take some self-restraint on the part of everyone to hold their oral testimony to a minimum in order that all of you who have requested an opportunity to testify can be heard. As chairman, I will try to insure that we stick with the times agreed.

So, in keeping with the subcommittee's wishes, I ask the detailed prepared statements that each of you has worked out very carefully be submitted for the record, where they will be carefully reviewed, and, without objection, that will be done. This is the record that the subcommittee will study in determining its judgments and recommendations for the upcoming year. Also, in this way we will have a carefully detailed record so that members who are not present will be able to arrive at an independent judgment. If each witness will then highlight or summarize the points of his testimony, it will be most helpful to us. We will proceed on that basis.

CALIFORNIA PORT AND NAVIGATION PROJECTS

Senator SCHMITT. The first witness who will sort of coordinate the activities of others is Mr. Robert Langner, executive director, California Marine Affairs and Navigation Conference. As you, of course, bring up your other witnesses, you will introduce them. Welcome.

Mr. LANGNER. Thank you very much, Mr. Chairman. We will try to maintain our reputation for conciseness and brevity of some 23 years' standing.

Several of our congressional Representatives are here. Congressman Glenn Anderson will lead off.

Senator SCHMITT. Congressman, welcome.

LOS ANGELES-LONG BEACH HARBORS, CALIF.

STATEMENT OF HON. GLENN ANDERSON, U.S. REPRESENTATIVE FROM CALIFORNIA

Mr. ANDERSON. Mr. Chairman, thank you very much for permitting me to testify before your committee here today. My remarks will be very brief. I know you have a full slate of witnesses.

The details of the issues I wish to address will be presented by Mr. Jack Wells, representing the Port of Los Angeles, and Mr. Ray Berbower, representing the Port of Long Beach. Both of these ports, which handle 100 million tons of revenue annually, are located in the district I am privileged to represent. I would like to make note of the fact both of the ports are working closely together for the common good to develop the San Pedro Bay's needs for commerce and navigation. I think this is particularly significant as we do not see a sometimes wasted competition for Federal dollars, but rather deliberation to gain the most from these dollars.

In 1976, the Congress authorized the deepening of the Los Angeles main channel to 45 feet. Thanks to your support in the past years, the actual dredging has commenced. The $11 million contained in the President's budget for 1982 to continue this project is in consonance with the Corps of Engineers' capability. I strongly urge this money be appropriated. The President also includes $480,000 to complete water and land transportation needs resulting from expansion and further development of the ports in years ahead. This was authorized by the Water Resource Development Act of 1976.

The 1976 act also authorized operation and maintenance of the Long Beach-Los Angeles Harbor model at Vicksburg. The President's budget contains $100,000 for the maintenance of this model. I respectfully request this sum be appropriated. It is commensurate also with the Corps' expressed capability.

SAN PEDRO BAY MODEL STUDY

The last item I wish to address is not included in the President's budget, but one I strongly feel is vital and is commensurate with the Corps' expressed capability. This is the requirements to use the model, whose maintenance I have just discussed, to study effects that landfills have on deep-water channels. The port's planned expansion and modernization programs total in excess of $700 million in the next 5 or so years and include development of facilities to accommodate large-bulk carriers. The designs of these programs are dependent on data available on the hydraulic model. To monitor the San Pedro Bay hydraulic model at Vicksburg, Miss., $885,000 is needed in 1982 to commence this project.

Mr. Chairman, these programs are extremely modest when compared to overall benefits that not only California but the entire Nation will derive from their completion. I suggest you appropriate the funds needed to accomplish that.

Thank you. I will be followed by Mr. Jack Wells, the first deputy executive director for the Port of Los Angeles.

Senator SCHMITT. Thank you. I wonder if Mr. Wells would defer. Senator Hayakawa has joined you.

Mr. LANGNER. Senator Hayakawa certainly would be most happy to testify next.

Senator SCHMITT. Following his testimony, I will insert in the record a statement from Senator Alan Cranston.

CALIFORNIA WATER RESOURCE PROJECTS

STATEMENT OF HON. S. I. HAYAKAWA, U.S. SENATOR FROM CALIFORNIA

Senator HAYAKAWA. Thank you, Mr. Chairman.

Mr. Chairman, I am pleased that the Appropriations Subcommittee on Energy and Water Development has set aside time this afternoon to hear testimony on a variety of water projects affecting California. The fact that you have provided this specific opportunity demonstrates recognition of the urgent needs of California's ongoing and future water projects.

In a State as large and diverse as California, there is a need for many types of water projects. Flood control projects prevent and minimize economic as well as physical loss to cities and farms. The proposed Santa Ana River flood control project would have the capability to handle the most severe flood likely to occur in the Santa Ana basin. Such a flood could harm as many as 2 million and cause damages and economic losses estimated at over $9 billion.

Slowly, but surely, California is losing its beaches due to erosion. In some cases, as in the city of Oceanside, the beach has almost completely disappeared. I have seen the beach at Oceanside and it is kind of a pathetic sight to see that beach being eroded. The impact of the loss of Oceanside's prime attraction—its beaches—set off a chain reaction of a decline in tourism, deterioration of the shorefront area, the exodus of families, the closing of businesses, and the increase in crime.

It is really pathetic, Mr. Chairman, to see these farmers, resort hotels, and motels just simply close down because the sand is no longer there.

These are but two of the problems California is faced with today. You will be hearing specific testimony later from representatives of various California water projects, illustrating their needs and, in some cases, clarifying project functions.

This is a very difficult year for anyone to come before Congress and ask for money as I am doing now. In fact, I am embarrassed to do it.

Senator SCHMITT. I am embarrassed to be listening. [Laughter.]

Senator HAYAKAWA. Nevertheless, I am committed to the passage of the President's budget. At the same time, I am equally anxious to provide California with the necessary tools it needs to protect itself from nature's destruction while providing additional tools for maintaining a balanced and stable economy from agriculture to tourism. I believe we can and we must achieve these goals.

Thank you, Mr. Chairman.

Senator SCHMITT. Thank you, Senator.

PREPARED STATEMENT OF SENATOR CRANSTON

Now, as I mentioned, I will make part of the record the prepared statement of Senator Cranston.

[The statement follows:]

STATEMENT OF SENATOR ALAN CRANSTON

Mr. Chairman, I'm pleased to have this opportunity to present testimony on federal funding for water resource department projects in California in fiscal year 1982. These Army Corps of Engineers and Water and Power Resources Service projects provide important economic and social benefits through flood protection, beach erosion control, navigation improvements, and development of municipal, industrial and agricultural water supplies.

The fiscal year 1982 budget submitted to Congress in January by the Carter Administration included $108,302,000 for the Corps of Engineers surveys, advanced engineering and construction program in California and $113,999,000 for the Water and Power Resources Service reclamation program in California. The revised budget submitted by the Reagan Administration earlier this month deleted or reduced funds for eleven California projects -- for a total savings of $18,590,000. This recommendation represents a reduction of less than 9 percent in the proposed California water budget.

I agree with President Reagan that we must bring inflation under control and that reducing the federal deficit is one way to go about it. I want to work with him wherever possible in reducing federal spending without causing irreversible damage to the environment or extreme hardship to those dependent upon federal programs.

Given the generosity with which the Reagan budget treats water resource development in California as compared with cuts elsewhere in other federal programs, it's hard to make the case for increases in the total dollar amount available for California water projects. I do want to comment, however, on the Reagan budget revisions. As you may know, the Reagan budget reduces the funding for the San Felipe Project from $48,700,000 to $37,100,000 for a budget cut of $10,600,000. The San Felipe Project is one which I have supported and is a top priority of the State of California. When completed, the project will help relieve the ground water overdraft and subsidence problems in Santa Clara County and provide much needed municipal water supplies for the rapidly urbanizing Silicon Valley and neighbor areas.

The Reagan budget also eliminates all funding for eight Corps of Engineers studies, totalling $3,090,000. These studies -- Calleguas Creek flood control survey, Morro Bay Harbor navigation study, Sacramento River and tributaries bank protection study, Sacramento-San Joaquin Delta study, San Francisco Bay shoreline flood control study, San Francisco Harbor and Bay debris disposal navigation study, San Joaquin River Basin flood study, and Santa Barbara County streams flood control study -- are all ongoing studies. I question their termination or postponement mid-stream and note that the California Water Commission and the California Marine Affairs and Navigation Conference are recommending funding these studies at the original budget request level.

I want to raise the possibility that these studies be funded in fiscal year 1982 by making cuts elsewhere in the California water budget. This Committee must decide which is more important -- continuing studies already underway to determine how best to resolve serious flood control and navigation problems or to proceed with other construction projects like the development of recreation facilities at Warm Springs Dam or New Melones Lake. The Reagan Administration has already proposed cuts in these two projects and it may be possible to make deeper cuts in fiscal year 1982 funding without jeopardizing the principal flood control and water supply benefits of these projects.

I would also like to call attention to several priority projects which are not in the fiscal year 1982 budget -- Santa Ana River flood control project, Redbank-Fancher Creeks flood control project, the Oceanside beach erosion control project, Suisun Marsh facilities, and Santa Margarita project feasibility studies. Regarding the Santa Ana situation, this continues to be the most serious flood threat in the State of California. Due to appreciation of property values, the potential damage to property in the flood plain is now $9 billion if Prado Dam fails before the Santa Ana flood improvements are constructed. The Redbank-Fancher Creeks project is needed to provide protection to a 57,000 acre area with a population in excess of 119,000 and a value of over $1.6 billion. At present the average annual flood damages in the flood plain amount to $6 million and affect both urban and agricultural properties.

Both the proposed Santa Ana River flood control project and the Redbank-Fancher Creeks project currently lack project construction authorization. But it's my understanding that under the existing study authorization for Redbank-Fancher Creeks, funds could be appropriated to undertake necessary pre-construction work -- planning and engineering studies -- and that the Corps has the capability of using $400,000 in fiscal year 1982 for this purpose.

Regarding the Oceanside beach erosion project, last year Congress added $3 million to the Corps of Engineers fiscal year 1981 budget for sand replenishment at Oceanside, California. This beach nourishment work is essential to protect Oceanside properties until a permanent solution to the beach erosion problem can be implemented. The City of Oceanside has proposed a sand bypass be constructed at Oceanside Harbor. This bypass would ensure continual replenishment of Oceanside's beaches which have been seriously eroded as a result of federal construction of Camp Pendleton Harbor immediately to the north during World War II. The estimated total cost of the sand bypass project is $7 million. It is my understanding that the Corps of Engineers has the authority under its maintenance responsibilities to install a sand bypass. It's vital to do this work now to get the maximum benefit of the $3 million worth of sand which will be put on the beach later this year. I hope, given the critical nature of the situation, that funding can be accommodated in the FY 1982 Energy and Water Appropriations Bill through other adjustments in the budget.

Mr. Chairman, you will be hearing this afternoon from other members of the California Congressional delegation, the California Water Commission, the California Marine Affairs and Navigation Conference, representatives of flood control districts, water districts, port commissions, and the city and county governments who support water resources development in California. These Californians are cognizant of the budget situation and their requests for augmentation or reprioritizing the Reagan Administration's budget requests are being made only after careful, conservative analysis. The California Water Commission for example is asking for just $5 million more in the Water and Power Resources Service program in California basically to address environmental concerns. So I do hope that you will weigh very carefully the testimony presented today.

Thank you for your continuing support of water development in California.

HANSEN DAM, CALIF.

STATEMENT OF HON. BOBBIE FIEDLER, U.S. REPRESENTATIVE FROM CALIFORNIA

Senator SCHMITT. In deference to my colleagues from the other body, Congresswoman Fiedler, would you care to make your statement at this time.

Ms. FIEDLER. Thank you very much.

Since I believe a picture is worth a thousand words, I will stick to the picture. Thank you for the courtesy to testify.

I brought with me a picture of the Hansen Dam, which at one time was totally filled. It is now filled with silt and only a small amount of original space remains to handle the flood control waters which come through that area. I am here today to ask for $500,000 in support of the project which is under discussion by the Corps of Engineers to remove the silt in order to return to us that very valuable space which is necessary for flood control and water conservation.

A short distance away from this area is a very large pit owned by Conrock which we believe would remove the silt and put it in the pit. But we need a study to evaluate that. Initially, this project was to take the silt out of the area and haul it all the way out to the desert, which would have cost $100 million. We know by the time we are through with the study it can be done at a fraction of that cost.

This is the way it ought to look when it is completed. Actually, that happens to be outside; that is the final resolution of the problem.

Thank you very much for permitting me to take a few moments of your time. I have submitted for the record a complete description of the specific problems and what we hope to be some of the specific solutions.

Senator SCHMITT. Thank you, Congresswoman. It will be in our record.

[The statement follows:]

STATEMENT OF CONGRESSMAN BOBBIE FIEDLER

Mr. Chairman, members of the Committee, I appreciate this opportunity to testify before you as part of the California Water Commission presentation on water projects of importance to our State.

I would like to briefly comment on the Hansen Dam Project, which is located in my Congressional District in the City of Los Angeles, and is one of the projects recommended by the California Water Commission. The California Water Commission and the City of Los Angeles recommends that $500,000 be appropriated in Fiscal Year 1982 for the U.S. Corps of Engineers to complete a feasibility study to determine the best means of desilting Hansen Dam and restoring the water conservation and recreation operation as well as meeting the needed flood control requirements. I am in full agreement with this recommendation.

BACKGROUND

Hansen Dam, located in the San Fernando Valley, has provided for decades important benefits to the residents of Southern California by controlling floods, conserving storm runoffs and local rainfall which become part of Los Angeles' water supply, and by serving as a source of water-oriented recreation. The dam was authorized by the Flood Control Act in 1936, and completed in 1940. Recreation at the project was authorized by the Flood Control Act of 1944. The dam was constructed and is operated by the U.S. Corps of Engineers.

However, since 1969 the reservoir behind the dam has been filling up with silt (estimated in excess of 20 million cubic yards of mineral debris), primarily due to fire-related erosion originating from the local canyon hills. As a result, the total storage capacity of the reservoir has been reduced from a 1940 figure at 35,000 acre-feet to a present estimate of 26,000 acre-feet, a volume reduction of 27%. According to the Corps of Engineers, the present capacity exceeds the flood control storage required for safe operation by 1000 acre-feet; however, additional inflows of silt will eliminate this margin of safety in the near future.

Moreover, this situation has resulted in the loss of water supply to Los Angeles and virtually to Southern California. Spreading basins for recharge of the local ground water supply are operated downstream of the dam by the Los Angeles County Flood Control District, and by the Los Angeles Department of Water and Power. In the past, the Corps of Engineers, in coordination with these two agencies, and as part of the dam operation, has impounded water behind the dam for controlled release into these spreading grounds. However, due to the significant reduction in reservoir capacity, the Corps has had to evacuate the water from the reservoir during and immediately after the floods. This has substantially eliminated the opportunity for use of the spreading grounds and has caused siltation and plugging of the downstream grounds on the occasions when the basins are used.

Furthermore, the recreational use of the reservoir has been seriously curtailed by the silt accumulation. The surface area of the reservoir has been significantly reduced from 140± to 30 acres, a surface area reduction of approximately 79 percent (see Exhibit 1). In the past, the reservoir was used for water skiing, boating, swimming, fishing and other activities under the supervision of the Los Angeles Department of Recreation and Parks. This reservoir is the only water-oriented recreation in the San Fernando Valley and is very important to residents. The local community is now forced to go without water-oriented recreation, or travel significant distances.

CURRENT STUDY EFFORT

The Corps of Engineers is presently conducting a limited $10,000 alternatives study, initiated in November, 1980, only to determine possible method(s) to alleviate the short-term flood control problem at the dam. Among some of the alternatives under study include: 1) trucking part of the debris from the dam; 2) raising the dam's embankment, and 3) increasing the water outflow capability of the dam. The Corps estimates that the study will be completed in June, 1981. The Corps has also indicated that the modification of the project to provide water conservation is being examined under the Los Angeles County Drainage Area Review Study scheduled for completion in October, 1985. Under this study, Hansen Dam would be one of numerous projects and facilities to be reviewed under a study budget of $500,000.

Under the Corps' current study plan, the residents of Los Angeles and Southern California would not realize the water conservation and recreation benefits of Hansen Dam until 1987 at the earliest.

RECOMMENDED STUDY EFFORT

The City of Los Angeles and the California Water Commission recommend that $500,000 be appropriated in FY 1982 for the U.S. Corps of Engineers to accomplish this objective. We believe that the Hansen Dam project warrants a separate study and that the current study scope should be expanded to include all three project purposes -- flood control, recreation and water conservation. Various alternatives, which consider all three project purposes as equally important components in an integrated manner, should be identified and assessed including the preparation of comparative cost estimates.

In closing, Mr. Chairman, I want to thank you and Members of the Subcommittee for your attention to our needs in California.

SAN FRANCISCO BAY TO STOCKTON SHIP CHANNEL

STATEMENT OF HON. NORMAN D. SHUMWAY, U.S. REPRESENTATIVE FROM CALIFORNIA

Senator SCHMITT. I believe we have one more Member from the House here today, Congressman Shumway. Would you like to proceed?

Mr. SHUMWAY. Thank you, Mr. Chairman. I appreciate the opportunity to speak just briefly to the subcommittee.

My hometown is Stockton, Calif., which is the site of the Port of Stockton, a small port on the western seaboard, but nevertheless a very important one and at the present time and a healthy one. But the Port of Stockton does face a problem of declining service to the world's maritime fleet because the depth of the channel will not permit vessels of the deeper draft, which are now becoming very common, to negotiate their way up the San Francisco Bay to the Port of Stockton. Many, many years ago, there was authorized a Corps project to extend the depth from the present 30 feet to 35 feet. This year for the first time we have in the President's budget—that is, President Reagan's proposed budget—a sum of $1.4 million, most of which has been earmarked to begin the construction of that project.

I would just like to affirm to the committee how important that project is, how vital it is for California—I believe the entire Nation—and urge upon the committee it approve that budget item and allow us proceed with that project.

Senator SCHMITT. Thank you, Congressman.

[The statement follows:]

STATEMENT OF CONGRESSMAN NORMAN D. SHUMWAY

Mr. Chairman, I appreciate this opportunity to testify in support of a number of public works projects which are vital to my Congressional District and to the entire State of California. I wish to commend the Subcommittee for its willingness to hear what we Californians have to say and for its thoughtful consideration of our budget requests.

Mr. Chairman, it hardly needs to be said that a different set of priorities and guidelines will govern the actions of this Subcommittee and this Congress during its FY82 budget deliberations. There are, as in the past, a number of worthwhile projects and a limited amount of available funds; but there is also, as never before, an overriding need to reduce dramatically the rate of growth in federal spending.

I am pleased to support the President's program for economic recovery in general and his proposed revisions in the FY82 budget requests of both the Army Corps of Engineers and the Water and Power Resources Service in particular. These cuts will eliminate more than $3 million in funding for water and energy related projects of immediate interest to my Congressional District -- not to mention, the budget revisions which will have an even greater impact on the entire State of California. And yet, Mr. Chairman, I am convinced that our long-range interests -- namely, a healthy and prosperous economy -- will only be served if we the Congress have the resolve to make these necessary cuts in funding now.

As you know, California's 14th Congressional District is made up of nine counties -- an area which includes a large portion of the Central Valley, the Mother Lode country, and the Sierra Nevada mountains. This diverse region provides a substantial amount of the Federal Central Valley Project's annual water yield, as well as possessing rich agricultural land which greatly benefits from such water deliveries.

Agriculture is the leading employer and source of revenue in my district. Water -- which truly is the life blood of California -- is an absolute necessity. The continued operation of water projects, as well as the studies mentioned here today are therefore vitally important. I should add that the constant threat of flooding in the Sacramento-San Joaquin Delta, portions of which are also in my district, underscore the necessity of the flood control benefits provided by the projects under consideration today.

The revised FY82 funding levels and FY81 reprogramming suggestions which I am advocating today are both responsible and essential for these public works projects.

I recommend the following:

ARMY CORPS OF ENGINEERS

1. San Francisco Bay to Stockton Ship Channel Project -- $1,400,000

The existing 30 foot channel must be dredged an additional five feet in order to accomodate a greater percentage of the world's merchant marine fleet. The Port of Stockton is one of the largest employers in San Joaquin County, and the channel deepening is vital for its continued economic viability.

It is my understanding that $800,000 of the Corps' request has been earmarked for the actual construction of this project. I join the Port of Stockton, the California Marine Affairs and Navigation Conference, and the California Water Commission in strongly supporting the President's FY82 budget of $1,400,000.

2. New Melones Lake -- $12,700,000

When filled to its full capacity of 2.4 million acre-feet, the New Melones Reservoir will generate 455 million kilowatt hours of clean and efficient power each year -- an amount sufficient to displace 830,000 barrels of imported crude oil. New Melones will also provide flood control, fishery protection, and recreational benefits, as well as yielding significant amounts of irrigation water for use in water-short areas.

The President's revised budget reduced the Corps' original request by $1,300,000. This cut will delay for one year the relocation of a highway bridge for downstream access to recreational facilities. It is my understanding that this component, as well as the construction of overnight facilities at the reservoir, will be strectched out -- though not eliminated from future funding requests.

I would like to join the California Water Commission, the Stockton City Council, and San Joaquin County in endorsing the President's request of $12,700,000 for FY82.

3. Sacramento River Bank Protection -- $3,400,000

It is essential that construction of the bank protection and erosion control project continue so as to assure the protection of rural areas which account for a major portion of California's agricultural output.

I support the President's FY82 budget request.

4. Surveys

The budget requests submitted to the Subcommittee by the Stockton City Council and San Joaquin County relating to the Corps' surveys of the Sacramento-San Joaquin Delta and the San Joaquin River Basin were based on the former Administration's FY82 budget figures. I am pleased to report that City and County officials have joined me in supporting the President's proposal to eliminate FY82 funding for both studies.

It is my understanding, however, that the Army Corps will ask the Appropriations Committee for approval to reprogram $45,000 in FY81 funding for the Sacramento-San Joaquin Delta Surveys in order to expedite these studies and to complete a Draft Report by December, 1981. I would urge the Committee to grant such approval following the submission of the Corps' request.

5. Operation and Maintenance

I fully support the FY82 budget requests of the Army Corps of Engineers for the operation and maintenance of the following projects:

a. Farmington Dam	$ 66,000
b. New Hogan Lake	1,020,000
c. New Melones (downstream channel)	388,000
d. Sacramento River	2,637,000
e. San Joaquin River	1,340,000

WATER AND POWER RESOURCES SERVICE

1. Auburn-Folsom South Unit -- $4,267,000

I support the President's total FY82 budget request of $4,267,000 -- with $2,841,000 earmarked for additional studies and maintenance of facilities associated with Auburn Dam, and the remaining $1,426,000 allocated for further work on the recreational facilities at the Sugar Pine Reservoir.

On December 30, 1980, former Secretary of the Interior Andrus decided the long-standing issue of dam safety by concluding that a concrete gravity dam would be an appropriate design. However, the Secretary declined to recommend the reauthorization of the project until certain economic and environmental concerns had been resolved.

The former Secretary's decision was released too late to allow the prior Administration to request additional FY81 funds to complete the important Folsom South Canal -- Lower American River Alternatives Study. It is my understanding that the Water and Power Resoures Service has already submitted a request, which has not been cleared by the Office of Management and Budget, for the Appropriation Committee's approval to reprogram $390,000 in FY81 for the completion of the Lower American River Alternatives Study.

Ground water tables in Eastern San Joaquin County continue to decline rapidly and must be augmented by water supplies from the Folsom South Canal. Completion of the important Lower American Alternatives Study at the earliest possible date is essential for final approval of Folsom South. I therefore respectfully urge that -- if the FY81 reprogramming request of $390,000 is not submitted by the new Administration in a timely manner -- the Subcommittee should consider a stretch-out of at least $400,000 in funding for the Sugar Pine recreational facilities and appropriate the resulting savings for the early completion of the Lower American Study. Such action would not increase the Water and Power Resources Service FY82 budget; rather, it would result in a reallocation of funds to a project of higher priority.

2. Delta Support Studies -- $775,000

I am pleased to report that the Stockton City Council and San Joaquin County have joined me in strongly supporting the President's request of $775,000. This appropriation will allow the Water and Power Resources Service to meet its responsibilities in the Sacramento-San Joaquin Delta.

3. General Investigations

I support the President's request for the following investigations:

a. Central Valley Project Fish and Wildlife Management Studies	$ 475,000
b. Environmental and Interagency Coordination Activities	475,000
c. Technical Assistance to States	37,000
d. Central California-Nevada Wind-Energy Study	172,000

4. Operation and Maintenance

I endorse the President's request for the operation and maintenance of the following projects:

a. Central Valley Project	29,679,000
b. Soil and Moisture Conservation	900,000

In closing, I wish to bring to the Subcommittee's attention an important matter regarding the future operation and maintenance of the New Melones Reservoir. In the very near future, the Interior Secretary is expected to issue a long awaited decision which will authorize the filling of the reservoir to its full maximum capacity, define the areas to be included in the Stanislaus River Basin, and allocate some firm and interim water supplies to water-short areas.

It is absolutely essential that the Water and Power Resources Service be prepared to enter into contracts for water service as soon as adequate supplies have been stored in the reservoir. However, delays in the decision-making process described above have unfortunately resulted in the omission of funds in both the current fiscal year and in the FY82 budget request which would carry the New Melones project forward into its next important phase.

It is my understanding that shortly after the Interior Secretary has made the basin determination and water allocation decisions, the Water and Power Resources Service will ask the Appropriations Committee for approval to reprogram funds from its Central Valley Project operation and management FY81 budget to commence important studies of diversion and conveyance locations, contracting conditions, and payment capabilities associated with the New Melones Reservoir. I would urge strongly that the Committee approve such authority following the submission of the Water and Power Resources Service's request.

Furthermore, I would suggest that the Subcommittee earmark an additional $200,000 in funding from the Central Valley Project operation and management FY82 budget request to allow these additional New Melones studies to be continued, and hopefully completed, by the end of FY82.

ADDITIONAL PREPARED STATEMENT

Senator SCHMITT. I understand Congressman Matsui of the 3d District of California has submitted a statement regarding the Sacramento River deepwater ship channel project. Without objection, his statement will be incorporated in the record at this point.

[The statement follows:]

STATEMENT OF REPRESENTATIVE ROBERT T. MATSUI

Mr. Chairman and members of the subcommittee, I respectfully urge your approval of a $400,000 appropriation to be used in deepening the Sacramento River deepwater channel. Since a feasibility report and an environmental impact statement for this project are expected to be approved in the very near future, I am eager to see the funds appropriated so that work can begin on deepening the channel in fiscal year 1982.

The Sacramento River deepwater channel is in particular need of deepening if the Port of Sacramento is to receive vessels with deeper drafts and, thereby, be able to compete successfully in the world market. The need for this is clearly demonstrated by figures which indicate that 44 percent of the ships loading grain for export at Sacramento last year had to be topped off in deeper water. Similarly, receiving ports for Sacramento's wood chip exports currently offer a draft of over 39 feet, while Sacramento can only accommodate ships with 30-foot drafts.

Without deepening the channel, it can reasonably be expected that shippers will, in the near future, seek other ports from which to operate. This would put an end to the tremendous successes the port has enjoyed since the Sacramento River deepwater ship channel was completed in 1963.

In that first year of operation, the Port of Sacramento handled 41,000 tons. In the following 17 years, tonnage handled at Sacramento increased nearly 80-fold, to a volume of over 3,250,000 tons in 1980. This was a healthy 45-percent increase over the 1979 total.

These figures are particularly impressive when one realizes that the Army Corps of Engineers did not expect the port to reach the 3,250,000-ton level until the year 2060. In fact, the Corps of Engineers' feasibility report on this project indicated that it will have a profitable benefit-cost ratio of 2.2, further confirming the value of deepening the channel.

I hope that the subcommittee will be able to include this project in the energy and water development appropriations for fiscal year 1982. It is an especially worthwhile investment and will contribute significantly to the well-being of the port, to commerce in California, and to our national economic health.

Los Angeles-Long Beach Harbor, Calif.

STATEMENT OF JACK WELLS, DEPUTY EXECUTIVE DIRECTOR, PORT OF LOS ANGELES

Mr. Wells. Mr. Chairman, I am Jack Wells. I am the deputy executive director for the Port of Los Angeles.

First, I would like to introduce the president of our commission, Mr. Jun Moro, and the other gentlemen accompanying us—Mr. Fred Heim, who is a member of the board of harbor commissioners of the city of Los Angeles; and Mr. Ed Gorman, who is the chief harbor engineer for the Port of Los Angeles.

Dr. White Perry, our port's executive director, has prepared a statement on behalf of the Los Angeles Board of Harbor Commissioners, and I would like to request the statement be placed in the record at this hearing.

Congressman Anderson has outlined our funding needs in the San Pedro Bay. Therefore, I would like to thank you, Mr. Chairman, for your continued support of Los Angeles Harbor. We urge you to make it possible for us to continue to fulfill our responsibility as a west coast major port complex. We will be able to do that, Mr. Chairman, but only with your help and that of Congress. We urge you to recommend full funding of the projects outlined in Congressman Anderson's remarks and our own testimony which you have placed in your record.

Thank you very much.

Senator Schmitt. Thank you, Mr. Wells.

[The statement follows:]

STATEMENT OF DR. E. L. PERRY, EXECUTIVE DIRECTOR, PORT OF LOS ANGELES

Mr. Chairman, I am E. L. Perry, Executive Director of the Port of Los Angeles, and I am representing the Los Angeles Board of Harbor Commissioners at this hearing. I appreciate the opportunity to appear before you today to respectfully request Congress to appropriate $11 million in fiscal year 1982 so that the deepening of our port's main channel, turning basins and inner harbor may continue as scheduled.

The deepening of the channels at the Port of Los Angeles from -35 to -45 feet not only will serve the national defense and public interest, but is critical to California and the entire nation. The project was authorized by Congress under the Water Resources Development Act of 1976 (PL94-587), which states in part that this navigation project is "hereby adopted and authorized to be prosecuted by the Secretary of the Army, acting through the Chief of Engineers, substantially in accordance with the plans and subject to the conditions recommended by the Chief of Engineers . . ." The authorization bill by Congress emphasized the need for prompt implementation of the project.

Mr. Chairman, I am very happy to report to this committee that just last week, with the throwing of the symbolic switch along our Main Channel, Congressman Glenn Anderson and Los Angeles Mayor Tom Bradley hailed the start of this $61 million deepening project and the dredging is going on even as we meet here today.

With representatives of the Los Angeles City Council, Harbor Commissioners, Corps of Engineers representatives, and a group of some 200 government officials, Harbor tenants and local community leaders looking on, the Hydro Pacific electric dredge began its six-days-per-week, 30-month project, starting at the south end of the Port's Main Channel and progressing toward the Wilmington District.

The massive dredge is one of the world's largest and its cutter head is capable of 500-foot-wide sweeps of the harbor bottom. The contract for the project was awarded last year by the Corps to Potashnick Construction, Inc. of Cape Girardeau, Missouri, and calls for the use of the electric Hydro Pacific dredge in order to preserve the air quality of the Los Angeles Basin.

Actually, the construction phase of the project began last October with the building of a retaining wall for the dredge material and which is the foundation of a new and additional land area in our Port.

In order that the dredging and this project may go forward and remain on schedule, Mr. Chairman, we are asking your committee to approve the $11 million needed to match the Corps capability for continued construction of the project in fiscal year 1982. Eleven million dollars is in the President's budget and therefore we are not asking for any additional funds.

It is estimated that the dredging project will take 1 1/2 to 2 more years to complete. An appropriation equal to the Corps' capability of $11 million for this coming fiscal year will keep our project on schedule for an early 1983 completion.

The federal share of these navigation improvements for Los Angeles Harbor is being matched by $34.6 million in local contributions from the Port and Port users, bringing the total cost of the project to over $61 million. The project also will provide the impetus for the Port to spend more than $500 million in capital improvements over the next five years. In addition to these Port investments, millions more will be invested by private interests.

According to studies by the Corps of Engineers, the primary benefits to be derived from the project are in the national interest, and will result in significant transportation savings to U.S. producers and consumers of waterborne commerce.

The Corps has calculated these benefits to be 3.5 times the federal cost, which is a very favorable benefit to cost ratio. The Corps' analysis of the project indicates that the annual benefits to be derived from the deepening of the channel to a depth of 45 feet are more than $14 million. The project will substantially benefit and increase employment, both directly in the Port and indirectly in associated industries. It will enhance and support commerce activities in California and the entire southwest part of our nation.

The Corps' cost/benefit ratio analysis does not include the growing movement of container cargo through the various bridge systems, which is a combined water-rail through movement -- a practical intermodal system. This movement is growing at a conservatively estimated rate of 10 percent per year. In 1980, over 33 percent of the movement was this type of bridge traffic and the percentage is still increasing at a significant rate. The growth is due to the diversion of Atlantic and Gulf Coasts-Far East cargoes rail/water movement through West Coast ports which move with greater frequency at a lesser cost and with faster transit times. Larger container ships requiring depths in excess of 35 feet are entering into service rapidly and now represent more than 50 percent of the world's container fleet. The greatest number of containerships in existence are dedicated to the U.S. West Coast-Far East service. Last year, the bridge system alone resulted in about 3 1/2 million revenue tons of bridge container cargo passing through the Port of Los Angeles as the link between the Far East and Gulf/Atlantic area import and export markets.

An equally important project benefit will be greater navigational safety. A large percentage of vessels in the world fleet cannot now enter the Port of Los Angeles because of the limitation of the 35 foot depth. This creates the necessity of lightering bulk liquid cargo from the larger vessels because they are unable to enter the harbor until their draft has been decreased. The result: time delays and increases in operating costs - all passed on to the consumer - plus the increased use of finite fuel and its contribution to air pollution.

Those vessels that can enter the harbor often have only minimal clearance which adds to the difficulties in ship handling. Deepening of the harbor channels will allow for increased quantities in commerce, with fewer vessel passages and greater bottom clearance for a higher percentage of ships. Also, the larger containerships cannot take on cargo and fuel oil at their berths because of draft constraints and are forced to proceed to an anchorage in deeper water to take on fuel oil thus adding the inefficiences of cost and time to the movement of waterborne commerce.

Another very important benefit from the deepening project is the creation of additional land off the southern end of the Port's Terminal Island. To be created from the dredge material, this new land will enable the Port of Los Angeles to create facilities for the handling of bulk commodities including coal and other vital energy cargoes.

Mr. Chairman, just last February, the Los Angeles Board of Harbor Commissioners approved in concept the development of a major coal terminal to be located on this new land on Terminal Island. The Board directed than an Environmental Impact Report be prepared for the development, including the dredging of a 65-foot channel to the southern portion of Terminal Island and the creation of necessary landfill in the Outer Harbor for relocation of hazardous liquid bulk terminals presently located adjacent to the harbor community. Both projects are included in the Port's extensive master plan and capital development program.

Such a major coal handling terminal at Los Angeles would be capable of storing millions of tons of coal and could load in excess of 20 million or more tons each year in vessels approaching 250,000 dwt.

Activities such as these at the Port of Los Angeles create many thousands of jobs, both directly and indirectly, and as tonnage increases, so do those jobs. Without the deepening project, normal and necessary economic growth in the area will significantly decline, with the unequivocal possibility of a significant decrease in jobs.

Completion of our deepening project will prevent many of our Port's modern terminal facilities from becoming obsolete, underutilized and gradually completely bypassed because of their inaccessibility to the larger more capital intensive vessels which require the deeper water. When our channels are deepened to minus 45 feet, we will be able to maintain the highest utilization possible of our facilities and the Port of Los Angeles will remain an economically strong element in the nation's commerce and transportation system.

As you are well aware, Mr. Chairman, the Federal Government's role in port development is to provide the channels and anchorages in the nation's navigable waters in the interest of commerce and national defense. In view of the world situation, the role of deeper water in major ports, as a part of national defense strategies, assumes an importance that must not be ignored. Local entities assist by providing the terminals and other facilities needed.

In addition, investment by the Federal Government in the Port of Los Angeles has yielded the highest return on investment of any port in the nation in the form of Customs' collections added to all other tax income generated.

We feel that the facts as presented justify our request for continued and full funding and support for the Los Angeles Harbor deepening project. Our request of $11 million for fiscal year 1981 will permit this vitally important project to proceed on schedule towards an early 1983 completion date.

The Mayor, City Council, the Board of Harbor Commissioners of the City of Los Angeles, all local government bodies in the San Pedro Bay area and port users unanimously support our project and urge your approval of the requested funding.

In addition to the Los Angeles Harbor deepening project, Mr. Chairman, there are two other San Pedro Bay projects under consideration for funding by your committee. These projects are the San Pedro Bay ports' Transportation Study and maintenance of the Corps of Engineers' Los Angeles and Long Beach Harbors model at Vicksburg, Mississippi.

The transportation study is a very important one for us in Los Angeles, because it is a vital tool that we use in planning our harbor and navigation improvements. The Port is but a link in the transportation of goods between supplier and user and all links must be adequately joined together. One is helpless without the other. As cargo volumes continue to increase in the Los Angeles/Long Beach area, rail, freeway and pipeline transportation must be ready to handle those increases. We are requesting an appropriation of $480,000 to complete the transportation study now under way. This amount matches both the President's budget for the study as well as the Corps' capability. We urge you to approve this funding.

The President's budget contains also $100,000 for the maintenance of the hydraulic model of Los Angeles and Long Beach Harbors at the Corps' testing station in Vicksburg, Mississippi. While $100,000 will only maintain the model in a ready-for-testing condition, it is extremely important that the model's maintenance be funded. If it isn't, the Corps of Engineers would not be able to respond to any testing needs that we or Long Beach may have.

Along these same lines, Port engineers, technical staffs of permit reviewing agencies and model investigators have found the Los Angeles/Long Beach Harbor hydraulic model to provide essential information required when planning improvements in the harbor complex. Information from the model testing and studies has greatly assisted in the making of decisions for these plans and for the growth of the ports. However, more detailed knowledge is still needed on tidal action and the effects of surges on moored ships.

A field data collection program is needed to measure the efficiency of tidal flushing and to define current patterns inside our breakwater. Such a program would also provide more direct measurement of ship surges caused by harbor seiching. These measurements, coupled with improved analysis by computer, will allow investigators to better predict the ship movements to be expected in newly created harbor channels and ship berthing areas. The President's budget for fiscal year 1982 does not include funding for such a program, estimated to cost $880,000. Therefore, Mr. Chairman, we respectfully request you and your committee to favorably consider an appropriation in the amount of $880,000 for the coming fiscal year. The Corps of Engineers has an equal capability for the model studies program.

As you know, Mr. Chairman, the Ports of Los Angeles and Long Beach sit side-by-side within San Pedro Bay in California. Together, these ports handle nearly $100 million revenue tons of cargo annually and neither port alone has the facilities or capability of meeting the needs of commerce and navigation in Southern California. This is why the two ports together and as a single geographic harbor will benefit from the completed Transportation Study now in progress and which your committee has supported and funded in the past. The operation and maintenance of the hydraulic model and the other projects in San Pedro Bay that your committee and Congress has supported and funded over the years also are mutually beneficial.

Again, we thank you, Mr. Chairman, and the members of your committee for your past and continued support for our projects.

STATEMENT OF RAYMOND BERBOWER, ASSISTANT CHIEF HARBOR ENGINEER, PORT OF LONG BEACH

Mr. BERBOWER. My name is Raymond Berbower, representing the Port of Long Beach. I, too, have submitted testimony for the record.

My words would also echo those of Congressman Anderson. In view of the $955 million of customs revenue generated by the ports, we feel the Port of Long Beach request for less than $1.5 million is truly a modest request.

Thank you very much.

Senator SCHMITT. Thank you.

[The statement follows:]

STATEMENT OF RAYMOND F. BERBOWER, ASSISTANT CHIEF HARBOR ENGINEER, PORT OF LONG BEACH, CALIF.

I am Raymond F. Berbower, Assistant Chief Harbor Engineer of the Port of Long Beach, California and I am authorized by the Board of Harbor Commissioners of the City of Long Beach to represent the Port of Long Beach in regard to appropriations for the Los Angeles and Long Beach Harbors Transportation Study, Hydraulic Model Maintenance, and San Pedro Bay Hydraulic Monitoring Program.

The Water Resources Development Act of 1976, in Section 163, authorized the Chief of Engineers to conduct a study of water and land transportation needs resulting from expansion and further development of the ports on San Pedro Bay. The study, initiated under a Fiscal Year 1978 appropriation, covers in depth the present and anticipated future needs for railroad and highway facilities to serve the two-port complex and the navigational aspects for commercial shipping and recreational boating. The President's budget for Fiscal Year 1982 includes $480,000 to complete this study. Congress is respectfully requested to appropriate $480,000 for Fiscal Year 1982 for this study, commensurate with the Corps of Engineers' capability.

The Water Resources Development Act of 1976, Section 123, also authorized the Chief of Engineers to operate and maintain the Los Angeles-Long Beach Harbor hydraulic model in Vicksburg, Mississippi. In the President's budget for Fiscal Year 1982, $100,000 has been included to maintain that model. Congress is respectfully requested to appropriate $100,000 under O & M funding for Fiscal Year 1982 for this project, commensurate with the Corps of Engineers' capability.

Under Fiscal Year 1971 appropriation, the U.S. Army Corps of Engineers Waterways Experiment Station installed instruments and monitored the hydraulic regime (wave energy and tidal circulation/flushing) over a fifteen-month period to obtain prototype data utilized in the design of the Los Angeles-Long Beach hydraulic model at Vicksburg. That monitoring program served its purpose, but did not provide adequate long-term data on which future port facilities can be adequately tested and designed, commensurate with the available technology and capabilities of the hydraulic and numerical (computer) models. A program for this much-needed data gathering has been developed by the Hydraulics Laboratory of the Waterways Experiment Station to augment the data previously obtained. Port of Long Beach long-term plans for deeper channels (76 to 80 feet) and companion landfills to accommodate large bulk carriers for much needed international trade, predominately coal exports, is contingent on obtaining such hydraulic data and subsequent model testing. The President's budget for Fiscal Year 1982 does not include the $880,000 O & M funding needed to acquire and place instrumentation for this program by the Waterways Experiment Station. However, Congress is respectfully requested to appropriate $880,000 for Fiscal Year 1982 for this program, commensurate with the Corps of Engineers' capability.

The modernization and expansion program of the Port of Long Beach is estimated to be in excess of $200,000,000 of local funds for the decade of the 1980's, and a similar or greater growth in the 1990's. Our current two-year program will utilize all existing available land areas. The subsequent programs can be carried out only if additional landfills and companion deep water channels and berths can be provided. Design of these programs is dependent on data obtainable from hydraulic monitoring of San Pedro Bay and hydraulic model testing, results of the Review of Reports, which is scheduled for completion in Fiscal Year 1981, and results of the Transportation Study for San Pedro Bay, which is scheduled for completion in Fiscal Year 1982.

Also, we find the current Corps of Engineers project to dredge the Los Angeles Harbor main channel to minus 45 feet, as authorized by the Congress in October 1976, to be in the best interest of overall utilization and development in San Pedro Bay.

Attached hereto is Resolution No. HD-1199 adopted by the Board of Harbor Commissioners of the City of Long Beach on March 2, 1981, which contains data relating to the background of the Reviews of Reports, hydraulic modeling, the San Pedro Bay Transportation Study, and other related matters, and which stresses the need for federal assistance in developing economic, technical and environmental background information essential to design and permitting of port facilities vital to regional and national interests. Agencies benefiting from these studies in San Pedro Bay include, but are not limited to, the Cities and Ports of Long Beach and Los Angeles, Los Angeles County, the State of California, the United States Navy and Coast Guard, and various State and Federal Environmental Agencies.

Thank you for permitting me the privilege of this presentation.

RESOLUTION NO. HD-1199

A RESOLUTION OF THE BOARD OF HARBOR COMMISSIONERS OF THE CITY OF LONG BEACH REQUESTING THE CONGRESS OF THE UNITED STATES TO APPROPRIATE FUNDS FOR HYDRAULIC MODEL MAINTENANCE, SAN PEDRO BAY WAVE AND TIDAL CIRCULATION MONITORING PROGRAM, AND TRANSPORTATION STUDIES BY THE UNITED STATES ARMY, CORPS OF ENGINEERS RELATING TO IMPROVEMENTS IN SAN PEDRO BAY AND MAKING A DETERMINATION RELATING THERETO

WHEREAS, the Ports of Long Beach and Los Angeles in San Pedro Bay, California are two of a limited number of sites on the West Coast which possess the potential for deep water ports as recommended in the West Coast Deep Water Port Facilities Study conducted by the United States Army, Corps of Engineers; and

WHEREAS, the Ports of Long Beach and Los Angeles have a record of physical and fiscal growth to the end that together the two are presently handling over 80 million metric tons (89 million short tons) of cargo annually valued at nearly $23 billion, which growth and activity are significant economic regional and national factors, and from which over $955 million in federal revenues from foreign imports are derived annually through United States Customs; and

WHEREAS, both Ports are now and are becoming increasingly hard-pressed to provide facilities to meet the needs of the shipping industry, and to that end are conducting extensive studies in conjunction with federal studies, to determine navigational, transportation, and environmental requirements to provide economic and adequate surge-free berthing and cargo handling facilities; and

WHEREAS, completion of the studies currently underway by the Corps of Engineers, which include the Review of Reports as requested by the Committees on Public Works of both the House and Senate, the maintenance and operation of the San Pedro Bay hydraulic model at Vicksburg, Mississippi, as authorized by Section 123 of the Water Resources Development Act of 1976, and the San Pedro Bay Transportation Study as authorized by Section 163 of the Water Resources Development Act of 1976 are all urgently needed for use in the design and permitting processes for future land fills for Port development; and

WHEREAS, to obtain long term data on the hydraulic regime in San Pedro Bay which activity consists of a two to five year monitoring program utilizing self-contained recording instruments to determine currents and energy entering the Bay to augment earlier monitoring and to verify specific needs for hydraulic model testing to assure tidal flushing and surge-free berthing; and

WHEREAS, all existing land in the Port of Long Beach which can be developed for shipping operations will have been utilized by 1982, and to meet the needs of the following decade, the design, permitting and construction of new lands must commence immediately; and

WHEREAS, the Board of Harbor Commissioners of the City of Long Beach, as a properly constituted and financially responsible local agency, by its Resolution No. HD-890, adopted August 30, 1965, expressed its intent to enter into such agreements as may be reasonably required to further federal projects for the development and improvement of Long Beach and Los Angeles Harbors; and

WHEREAS, the Director of Port Planning of the City of Long Beach Harbor Department has determined in a review of the applicability of the California Environmental Quality Act of 1970 (CEQA) to this resolution, that under the provisions of Section 15060 of the State Guidelines implementing CEQA, this resolution is not subject to the requirements of CEQA;

NOW, THEREFORE, the Board of Harbor Commissioners of the City of Long Beach resolves as follows:

1. The Board of Harbor Commissioners of the City of Long Beach hereby finds and determines that this resolution is not subject to the provisions of the California Environmental Quality Act of 1970, as amended.

2. That the Congress of the United States be, and is hereby, respectfully requested to appropriate simultaneously the funds necessary for the Chief of Engineers, United States Army, Corps of Engineers, to complete the San Pedro Bay Ports Transportation Study, which study was authorized by Section 163 of the Water Resources Development Act of 1976.

3. That the Congress of the United States be, and is hereby, respectfully requested to appropriate simultaneously the funds necessary for the Chief of Engineers, United States Army, Corps of Engineers to maintain the Los Angeles-Long Beach Harbors hydraulic model at the Waterways Experiment station at Vicksburg, Mississippi.

4. That the Congress of the United States be, and is hereby, respectfully requested to appropriate simultaneously the funds necessary for the Chief of Engineers, United States Army, Corps of Engineers to initiate a hydraulic monitoring program of San Pedro Bay to obtain prototype data essential to long range planning and design.

5. That the Executive Director of the Long Beach Harbor Department be, and he is hereby, directed to send copies of this resolution to the United States Senators and to Members of the House of Representatives from California, with a letter requesting their assistance in presenting this resolution before the proper Congressional committees.

6. That the Executive Director of the Long Beach Harbor Department be, and he is hereby, further directed to send copies of this resolution to the President of the United States; the Director, Office of Management and Budget; the Secretary of the Army; the Chief of Engineers; the Board of

Engineers for Rivers and Harbors; the United States Division Engineers, San Francisco; the District Engineer, Los Angeles; and such other interested persons as he may deem appropriate.

7. The Secretary of the Board shall certify to the passage of this resolution by the Board of Harbor Commissioners of the City of Long Beach, and it shall thereupon take effect.

8. The Secretary of the Board shall cause this resolution to be published once in the official newspaper of the City of Long Beach.

I hereby certify that the foregoing resolution was adopted by the Board of Harbor Commissioners of the City of Long Beach at its meeting of March 2, 1981, by the following vote:

Ayes: Commissioners: Langslet, DuVall, Hanna

Noes: Commissioners: None

Absent: Commissioners: Gray, Wilson

Acting Secretary

SAN FRANCISCO BAY TO STOCKTON DEEPWATER CHANNEL

STATEMENT OF ALEXANDER KRYGSMAN, PORT DIRECTOR, PORT OF STOCKTON

Mr. LANGNER. Representing the Port of Stockton is port director, Alexander Krygsman.

Mr. KRYGSMAN. Sir, I am Alexander Krysman. I am port director of the Port of Stockton. Congressman Shumway has already cited the Port of Stockton deepening and how important it is, so I will make a few remarks on it.

The Port of Stockton recognized as far back as 1952 that deeper channels would be needed for the movement of bulk cargoes, including coal, but not limited to coal. Grain, fertilizers, and many other bulk materials have the same requirements and need deeper channels as much as does the movement of coal. Our Nation and California needs ports that can handle bulk vessels that can carry coal, agricultural products, and other products that we export to help our balance of payments. Our Nation and California need ports that can handle the larger, more economical and more fuel-efficient vessels close to the production areas, both agricultural and industrial.

The Port of Stockton is such a port. However, it needs its channel deepened in order to remain viable and to adequately serve our Nation and California's needs. Funding of this project, therefore, is an investment that brings generous returns and will be anti-inflationary. We urge you to appropriate $1.4 million to fund construction for fiscal year 1982.

Senator, I would like to introduce Dr. Joe Blanchard, who is the commissioner of the Port of Stockton.

Thank you very much.

Senator SCHMITT. Thank you, sir.

[The statement follows:]

STATEMENT OF ALEXANDER KRYGSMAN, PORT DIRECTOR, PORT OF STOCKTON, CALIF.

I am Alexander Krygsman, Port Director of the Port of Stockton, Stockton, California.

The Port of Stockton Deepwater Channel deepening has been authorized since 1965.

The Port of Stockton is primarily a bulk port that serves industry and agriculture in the San Joaquin Valley in California and the bulk imports and exports of the Western States, including the coal areas of these States.

The Port of Stockton recognized as far back as 1952 that deeper channels would be needed for the movements of bulk cargoes, including coal, but not limited to coal. Grain, fertilizers and many other bulk materials have the same requirements and need deeper channels as much as does the movement of coal

The Port of Stockton has a bulk export dock that has handled coal in the past, handles coke, clay, fertilizers, sulphur and other bulk exports and can handle coal now, but deeper water is urgently needed.

A deepened channel will greatly benefit industrial expansion. Two industrial production plants were built in Stockton recently by major Japanese firms. Both of these firms listed deepwater port as a primary consideration to build an industrial plant in the Stockton, California area.

Our Nation and our State need expansion of up-to-date industrial plants and the jobs that expansion creates.

Our Nation and California needs ports that can handle deep draft bulk vessels to move the raw materials to enable production to be done in this country rather than import the finished foreign products.

Our Nation and California needs ports that can handle bulk vessels that can carry coal, agricultural products, and other products that we export to help our balance of payments.

Our Nation and California needs ports that can handle the larger more economical and more fuel efficient vessels close to the production areas, both agricultural and industrial to conserve energy.

The Port of Stockton is such a port. However, it needs its channel deepened in order to remain viable and to adequately serve our Nation and California's needs.

The savings in energy consumption alone over the life of the project will exceed all other economic benefits of this project and the cost benefit ratio is 2.6/1 without full consideration of the energy situation and cost.

This is an authorized project that deserves to be funded since the project will enhance industrial and agricultural productivity, will save energy, increase export capabilities and that will improve the Nation's balance of payments.

Funding of this project, therefore, is an investment that brings generous returns and will be anti-inflationary.

Mr. Chairman, this Nation needs to increase productivity, needs to conserve energy and needs to increase exports. We need to use our available funds to improve productivity and we need to improve our maritime capabilities - and that includes ports.

The Stockton Channel deepening project has overwhelming public support. At the Public Hearing, one hundred eight (108) expressions were presented in favor of this project and none (0) against. The city of Stockton supports it, San Joaquin County supports it, neighboring cities and counties support it and the State of California supports it. We urge you to appropriate 1.4 million dollars to fund construction for fiscal year 1981-82.

PORT OF REDWOOD CITY, CALIF.

STATEMENT OF FRED DI PIETRO, PORT DIRECTOR, PORT OF REDWOOD CITY

Mr. LANGNER. Representing the Port of Redwood City is Fred DiPietro, accompanied by his assistant, Mr. Raymond Thompson.

Mr. DI PIETRO. Mr. Chairman, I have submitted a written statement for the record.

Briefly, Redwood City is seeking an additional appropriation in 1982 of $675,000 to complete maintenance and dredging projects underway in this fiscal year. The Port of Redwood City has not been maintained for better than 12 years. In order to keep our channel open, we desperately require this funding.

Thank you, sir.

Senator SCHMITT. Thank you.

[The statement follows:]

STATEMENT OF FRED J. DIPIETRO, PORT DIRECTOR, PORT OF REDWOOD CITY, CALIF.

SUMMARY

The thrust of the testimony herein presented is to encourage the Congress to support necessary federal appropriations to ensure the continued capability of the Corps of Engineers to construct, maintain and improve California Navigation, Beach Erosion and Reclamation projects, with emphasis on the essential need to move forward on projects previously authorized by the Congress, especially those projects that directly affect the maintenance and improvement of our commercial ports and deep draft navigable waterways, including the federal channel at Redwood City, California.

I am Fred J. Di Pietro, Port Director, Port of Redwood City California.

I appreciate the opportunity to appear before your committee to encourage and support necessary federal appropriations to ensure the capability of the Corps of Engineers to construct, maintain and improve California Navigation, Beach Erosion and Water Reclamation projects.

Waterborne transportation and the commerce of the United States is a vital and unique sector of our economy. At a time when public funding and expenditure is under-going careful and prudent scrutiny and where Federal as well as State priorities are shifting, the needs of our maritime interests worldwide, require special attention.

We emphasize the essential need to move forward on projects previously authorized by the Congress, especially those projects directly affecting the maintenance and improvement of our commercial ports and navigable waterways.

Our ports and harbors face constant capital intensive development plans to provide daily operations for care and custody of growing international cargoes. Our harbors and navigation channels must remain open to meet the challenges of the changing face of international maritime fleets.

The proposed federal budget for fiscal year 1981 is of particular interest to my home port of Redwood City, California, in that regular maintenance of the federal channel in Redwood City harbor has not occurred since 1969. Despite growing vessel traffic and installation of new international waterborne industry, delays to regular maintenance dredging operations over the past 10 years are generally attributed to regulatory constraints and disagreements between environmental groups involving the disposal of dredge material upon lands acquired by the Port in compliance with our mandated responsibilities by the enabling Federal legislation passed by the Congress 45 years ago, and State Land Grants authorized by State Legislation 30 years ago.

Recognizing the need to maintain the Redwood City harbor channel because of increased vessel and commodity traffic, the Corps of Engineers is proceeding with a partial maintenance dredging project in the current fiscal year.

The Federal Budget, fiscal year 1980/81, includes $1.087 million dollars to complete maintenance dredging in Redwood City Harbor Channel. On original request for funding, the Corps of Engineers requested 1.6 million dollars to remove approximately 400,000 cubic yards of material to maintain the channel at project depth of 30 feet at mean lower low water. $1.087 million dollars was finally appropriated in FY 80/81 as a result of administration budget cuts prior to passage of budget legislation by the Congress.

The Corps of Engineers has prepared bids and specifications to remove only 290,000 cubic yards this fiscal year. Dredging is confined to the center of the deep draft channel in Redwood Creek and will exclude maintenance over San Bruno Shoals and the small craft recreation channel.

The Corps plans to remove the remaining material in fiscal year 81/82 if Congress will appropriate $650,000 dollars to complete.

Critical to the economics of ordinary maintenance dredging operations is the absolute requirement to dispose of dredged material at the acquatic site off Alcatraz Island, a distance of 27 miles from the project site. Cost of transporting dredge material reflects expenditure of half (50%) of the appropriated funds.

Considerable effort has been expended to bring to the attention of the Corps, U.S. Fish & Wildlife and State Regulatory Agencies alternate courses for the disposal of dredge materials on upland sites adjacent to the deep draft channel in Redwood City. Such disposal in the local project area will reflect efficient dispersal of federal funds to complete the project within budgeted appropriations.

Our efforts to divert disposal of the dredged material to adjacent properties are unsuccessful because of continuing environmental constraints. We will continue to pursue long range disposal plans, hopefully with the cooperation of the Corps of Engineers and U. S. Fish & Wildlife.

We urgently require the maintenance project to accomodate a projected annual increase of vessel traffic approximating 60 medium dry bulk carriers and petroleum tankers. We strongly request the support of this committee in recommending the funds necessary to complete maintenance dredging at Redwood City harbor.

Thank you.

SANTA CRUZ HARBOR, CALIF.

STATEMENT OF BRIAN FOSS, GENERAL MANAGER, SANTA CRUZ PORT DISTRICT

Mr. LANGNER. General manager Brian Foss, Santa Cruz Harbor District.

Mr. FOSS. Santa Cruz Port is asking for the full support of the Corps' capability. This will allow Santa Cruz to continue as a year-round port for navigation and commercial fishing. It will also allow ceiling of our west jetty which will reduce the amount of sand entering the harbor, thus release the Corps' cost over the period.

Thank you for your attention in this very tight year.

Senator SCHMITT. Thank you.

[The statement follows:]

STATEMENT OF BRIAN FOSS, GENERAL MANAGER, SANTA CRUZ PORT DISTRICT, CALIF.

This testimony is submitted to solicit your continued support for maintenance dredging at Santa Cruz Harbor. The Santa Cruz Harbor project, authorized under House Document 357 in 1958 and constructed in 1964, has had massive and perennial sand shoaling since its completion. Phased dredging has been the only practical means of keeping the channel navigable.

Santa Cruz Harbor is a regional and coastal resource of significant proportions. The Harbor was conceptualized as a multi-purpose facility serving commercial fishermen, recreational boaters, and coastal sailors seeking refuge from the open ocean. It has, from its opening day, realized these visions... and more. Whereas the federal investment of some $2.7 million was granted in support of a 360-boat harbor, this original investment now supports a 1,085 boat harbor. The entire complex is valued at $47.5 million.

COMMERCIAL FISHING - There are 265 commercial fishing vessels in the harbor to date. The value of these vessels is $6.8 million. The dollar value of fish landed by Santa Cruz based boats is in excess of $1.2 million a year. The associated industry -- fish buyers and retailers -- accounts for an additional $1 million of gross product. Additionally, from July through October, Santa Cruz Harbor becomes the resting stop for vessels engaged in the catching of pelagic fish (albacore, salmon, swordfish). In 1979, Santa Cruz provided 1,385 overnight accommodations for large commercial vessels from other ports; no monetary figure has been placed on this service. A new facility to be provided by Santa Cruz Port District will be a $1.7 million commercial fish transfer station and service center. It is scheduled for completion by 1982.

RECREATIONAL BOATING - The remaining 860 boats at Santa Cruz comprise an extremely active recreational body. Santa Cruz County enjoys a unique and beautiful topography and an exceptionally mild climate for Northern California. As a consequence, activity is high and a 30% use factor on usable days is not unusual. Additionally, the launch ramp is used by 11,150 boats per year. Excess demand is very high -- there are 1,200 people on the slip waiting list, all of whom have paid both initial and annual fees for such.

HARBOR OF REFUGE - Santa Cruz Harbor was designed to be an integral link in a chain of harbors that were to provide refuge to coastal sailors. The facilities in Monterey Bay are the only respite between Morro Bay, 100 miles to the south, and Half Moon Bay, 46 miles to the north. The following depicts the utilization of the harbor in regard to refuge:

Commercial Boats	1,385
Ocean-going Recreational Boats	13,631
Total Overnights per Year for Coastal Sailors	15,016

FISCAL YEAR 82 APPROPRIATION

The San Francisco District Corps of Engineers' full capability is $1,155,000.

WEST JETTY SEALING - $370,000 of the request is for sealing of the west jetty which allows sand to pass through. The sealing would prevent this and reduce dredging needs in the future by approximately 15% to 25%. We believe this request is cost effective and will pay for itself in four to seven years.

FULL-PHASE DREDGING - The remaining $785,000 would provide continued full-phase dredging of the harbor. This assures an open harbor 93% to 97% of the year. The economic consequence of closure due to shoaling is severe. During a delay in contract issuance the harbor shoaled during the period November 15 to December 15, 1979. The financial impact to on-premise harbor businesses was $151,000. The estimate for a closure during a similar period in FY 82 would be approximately $182,000. This does not include 26 other off-premise businesses which depend heavily on an open harbor.

The phase dredging has allowed Santa Cruz to become the fully productive, year-round facility that was envisioned, and more. Phase dredging sustains it. We ask that support for it be continued. We request the full $1,155,000 Corps' capability.

STATISTICAL DATA

FY 1980

Total Permanent Boats Berthed:	
Recreational	875
Commercial Fishing	215
Launchings:	10,500
Overnight Accommodations:	
Recreational	13,631
Commercial	1,385
Value of Vessels in the Harbor:	
Recreational	$14,600,000
Commercial	$ 7,500,000
Replacement Value of Facility:	$47,500,000
Investment:	
Initial Federal	$ 2,700,000
Total Local and State	$ 7,800,000

SANTA CRUZ HARBOR SHOAL - FALL 1979

ACTUAL FINANCIAL IMPACT

Loss of Revenue of On-premise Businesses -- November 15 to December 15:

Charter Boats	$ 11,500
Ships Chandlery, Yacht Sales/Fuel	$ 39,200
Boat Repair*	$ 20,000
Commercial Fishing**	$ 75,000
Other	$ 6,200
Off-premise Businesses are Affected Because of the Low Activity of a Closed Harbor	Loss Not Quantifiable
	$ 151,900
Average Daily Loss	$ 5,064

* Critical time of year for fish boat repair. At least ten boats from other harbors have not come in to Santa Cruz because of shoal conditions. They have gone elsewhere.

**This is an approximation based on 2,000 pounds of fish a day at $1.25 per pound.

Small Craft Harbor Program

STATEMENT OF SUSAN ANDERSON, PRESIDENT, CALIFORNIA MARINE PARKS AND HARBOR ASSOCIATION

Mr. Langner. We have in California an organization which is called the California Marine Parks and Harbors Association, represented by its president, Susan Anderson.

Ms. Anderson. Our membership in the California Marine Parks and Harbors Association represents in excess of 20,000 Californians through yacht clubs, marinas, harbor districts, municipalities, and business providing services to boating interests and individual boaters. Our organization has developed a statewide planning for small craft harbors and harbors of refuge, serving over 250,000 coastal boaters, providing in excess of 40 million nonboaters recreation. Each of the small craft projects before you today as part of the Corps of Engineers' funding program is a part of this important plan. I am here to offer broad-based, statewide support to the local interests and agencies who will be testifying on behalf of our small craft projects, and I urge support to the maximum extent possible.

Thank you.

Senator SCHMITT. Thank you.

Mr. LANGNER. Also representing the MPPH is Robert Wright, in the audience, and Mr. Charles Bennett.

SUNSET HARBOR, BOLSA CHICA AREA, CALIFORNIA

STATEMENT OF CHARLES BENNETT, CHAIRMAN, BOLSA CHICA COMMITTEE FOR CLEAN WATER AND OCEAN ACCESS

Mr. BENNETT. Mr. Chairman, as a part of the California Marine Parks and Harbors Association, I am here to speak today to an appropriation that has to do with the Sunset Bay Bolsa Chica area. We need very desperately to continue a Corps of Engineers study aimed at an ocean access in that area. We represent some 14 local citizen organizations under the Committee for Clean Water and Ocean Access. We certainly appreciate your having us here today and thank you.

Senator SCHMITT. Thank you.

Mr. LANGNER. I believe you have certain documents you want to submit.

Mr. BENNETT. They have been filed with the committee staff.

[The resolution follows:]

Resolution of Bolsa Chica Committee for Clean Water and Ocean Access

Whereas, it is the concern of our committee and the residents of Huntington Harbour, in Orange County, California, that our waters have become polluted and are a catch-basin for refuse and urban runoff from County flood control channels; and

Whereas, it is our belief and expectation that a navigable cut to the ocean at Bolsa Chica, in conjunction with a navigable channel to Huntington Harbour, will produce the tidal action necessary to help cleanse the waters of Huntington Harbour; and

Whereas, the Assistant Deputy Commander for Surface Warfare Systems, Department of the Navy, has asserted that the existing ocean entrance through the Naval Weapons Station at Anaheim Bay has been declared "potentially dangerous" by the Navy; and

Whereas, the provision of an additional navigable ocean access at Bolsa Chica will help relieve the growing traffic of small craft through the hazard zone of the Navy's ammunition loading facilities at Anaheim Bay; and

Whereas, our committee believes that the residents of Huntington Harbour, and the people throughout Orange County who utilize these waters for access to public launching facilities and home docking have a vested right to a permanent navigable ocean access; and

Whereas; the Army Corps of Engineers has had under study for four years a plan to effectuate a navigable channel to the Pacific Ocean at Bolsa Chica which would provide an alternate channel and reduce civilian boat traffic through the Navy danger zone; and

Whereas, this Army Corps of Engineers study is nearing completion; and

Whereas; the cleansing of Huntington Harbour waters, the revitalization of the Bolsa Chica salt marsh, the provision of needed public boating facilities, and residential and commercial development are all dependent upon completion of the Army Corps of Engineers study.

Therefore Now Be It Resolved that the Bolsa Chica Committee for Clean Water and Ocean Access does support and encourage the Army Corps of Engineers study to the end that the welfare of our community may be enhanced and the benefits enumerated in this resolution may be realized.

We Furthermore Do Resolve and Petition the Congress of the United States to recognize and support the urgent public needs by providing funding necessary to continue this vital work.

Passed and adopted by Bolsa Chica Committee for Clean Water and Ocean Access, in the City of Huntington Beach, California, the 16th day of March, 1981.

Charles C. Bennett, Chairman

Letter From Representative Daniel E. Lungren of California

March 25, 1981

The Honorable Tom Bevill, Chairman
Subcommittee on Energy and Water
Development
2362 Rayburn House Office Building
Washington, D.C. 20515

Dear Mr. Chairman:

Upon review of the Reagan Administration Revised Budget for FY82, I have noted that it contains $150,000 for continuation of the Sunset Harbor/Bolsa Chica Study currently being conducted by the Army Corps of Engineers. As you know, the Army Corps' partially completed project was initially authorized at $790,000 to review the feasibility of an ocean entrance or enhanced tidal flushing for an expanded marsh habitat/wildlife preserve at Bolsa Chica.

I support continuation of this study as it will provide vitally important data concerning alternative future uses of the Bolsa Chica area so that a fully informed decision can be made on an appropriate and cost effective project. Representatives from the State of California and effected local officials have advised me that they are in agreement that the Army Corps of Engineers study should be completed at the earliest possible time.

Accordingly, I would request that the budget item for continuation of the Sunset Harbor/Bolsa Chica Project be retained as it is a priority item for the State of California. Thank you for your attention to this request and please don't hesitate to contact me if I can provide further information on the study.

Sincerely,

Daniel E. Lungren
Member of Congress

North Coast of Los Angeles County Navigation Study

STATEMENT OF VICTOR ADORIAN, DIRECTOR, LOS ANGELES COUNTY DEPARTMENT OF SMALL CRAFT HARBORS

Mr. Langner. Representing the department of small craft harbors, former president of our association, Mr. Victor Adorian.

Mr. Adorian. Mr. Chairman, 25 years ago Congress authorized about $4.5 million to start Marina del Ray. That has since been matched by almost $200 million by private financing to build the largest small craft harbor in the world. We are looking for continuation of the Corps of Engineers' operation to study feasibility of expansion of this harbor. It is badly needed.

We very much appreciate your consideration. Thank you.

Senator Schmitt. Thank you.

[The statement follows:]

STATEMENT OF VICTOR ADORIAN, DIRECTOR, COUNTY OF LOS ANGELES DEPARTMENT OF SMALL CRAFT HARBORS

The Board of Supervisors of the County of Los Angeles adopted resolutions on March 13, 1979, March 4, 1980, and February 17, 1981 requesting the Congress of the United States to continue a federal survey in California, encompassing the north coastline of Los Angeles County, with the objective of determining feasible sites for the construction of small craft facilities. We request the Congress authorize funding for the full $80,000 capability of the Corps of Engineers to conduct a priority feasibility study in F.Y. 1982.

In recognition of the growing demand for small craft facilities, and of the great financial success of the joint federal/county Marina del Rey Small Craft Harbor Project, the Congress authorized the $470,000 survey in F.Y. 1968, together with an initial federal appropriation of $5,000 in the Corps of Engineers' budget, pursuant to the provisions of Public Law 14, 79th Congress, approved March 2, 1945. Since 1968 federal appropriations have totaled $165,000, which amount was expended by the Corps to survey a number of locations between Malibu and Marina del Rey, as shown on the enclosed maps.

With the elimination of a number of potentially feasible sites, and greatly accelerated public pressures for additional berthing, the County is investigating the possible expansion of berthing capacity into a privately owned land tract immediately adjacent to the harbor, and within the Marina del Rey itself.

Federal Participation and Economic Feasibility

Navigational projects may not proceed without the study and approval of the federal government. This study will establish the feasibility of the proposed expansion and the degree of proposed federal participation, if any.

The success of the original Marina del Rey Harbor Project provides the best justification to the Congress for inclusion of the $80,000 required to proceed with the feasibility survey in F.Y. 1982. The 800 acre Project is the largest small craft harbor facility in the world housing some 6000 boats in the water and 700 boats in dry storage. Additionally, there are 6300 housing units and a multiplicity of business activities. More than 300 business entities provide 8000 jobs and generate business revenues exceeding $150 million annually.

Some $4.6 million was expended by the federal government since Project authorization in 1954. This expenditure has been matched by $19 million in state and county funds and a $175 million investment by private industry to provide the great variety of public facilities available in the Project area.

Apart from these benefits the $4.6 million federal investment has resulted in the creation of jobs and wealth which, in turn, have contributed substantially to the coffers of federal, state and local jurisdictions. It is very probable that the annual return to the federal treasury alone greatly exceeds the initial investment.

Public Demand and Support for Boating Recreation

Since the federal north coast survey was initiated in 1968 the number of registered vessels owned by citizens of Los Angeles County has grown from 80,000 to 100,000, or 20% of the total state fleet of small craft. During this period of dramatic increase in small boat ownership there has been virtually no increase in berthing facilities in Los Angeles County for the sea going fleet. Modest increases in berthing in adjacent counties were quickly absorbed by growing local fleets.

All small craft harbors and marinas in Southern California, between Santa Barbara and the Mexican border are at 100% occupancy. The time required to obtain a berth ranges from one to eight years. In Los Angeles County alone there is a demand for more than 10,000 berths in excess of the 14,500 currently provided. In Southern California the shortage approximates 18,000 berths, according to statistics developed by the California State Department of Boating and Waterways.

The possible addition of small craft facilities and related business activities has the strong endorsement of business and community groups and organized boating clubs and associations. The need for additional facilities is clearly established. The positive impact of the boating facility and community upon the citizenry and economy of the region is great.

It is essential to recognize that the seven million citizens of Los Angeles County require recreational outlets. It is equally essential to recognize the economic impact of berthing shortages upon the boating industry, inflationary berth rental prices, employment, and tax revenues.

The presence of currently unimproved acreage in the vicinity of Marina del Rey may provide a site for boating facility development at a time when prospective sites have disappeared at an alarming rate. This situation may, in fact, constitute a last-time opportunity to provide additional water and boating development in the County. Your timely consideration is greatly appreciated. The County of Los Angeles stands ready to provide any additional data required.

SACRAMENTO RIVER DEEPWATER SHIP CHANNEL

STATEMENT OF MELVIN SHORE, PORT DIRECTOR, PORT OF SACRAMENTO

Mr. LANGNER. California's newest port, the Port of Sacramento, represented by its director, Melvin Shore.

Mr. SHORE. I would like to introduce Mrs. Twyla Thompson who is the supervisor of Yolo County.

I also would call your attention, Mr. Chairman, to the last page of the testimony I have submitted for the record, which is a graph showing the citations of the Corps of Engineers shown in a line diagonally across the graph. And the jagged line, if you consult it, you will see we are handling commodities in the Port of Sacramento at the rate the Corps of Engineers expected us to in 2060.

In order to continue to be able to do this job, the deepening of the ship channel is necessary. We currently have a 30-foot channel. We are seeking a 35-foot channel. This will make it possible to continue to serve the needs of this country and particulary, I call your attention, so many percent of our commodities are exported; therefore, we are working in aiding the balance of payments.

I specifically request $400,000 to continue the study that is underway at the present time. We would appreciate your consideration and take this time to thank you for listening to it.

Senator SCHMITT. Thank you, Mr. Shore.

[The statement follows:]

LOS ANGELES COUNTY
DEPARTMENT OF SMALL CRAFT HARBORS
MARINA DEL REY

TREND OF LEASEHOLD GROSS RECEIPTS (000'S) BY MAJOR CATEGORY

LEASE-HOLDS	CATEGORY	YEAR ENDING			6 MONTHS ENDING			3 MONTHS ENDING			% OF COUNTY RENTAL INCOME
		12/78	12/79	12/80	12/78	12/79	12/80	12/78	12/79	12/80	
24	ANCHORAGES & RELATED	$9,096	$9,994	$11,075	$4,759	$5,075	$5,730	$2,296	$2,451	$2,766	
	% Change Over Prior Period		10%	11%		7%	13%		7%	13%	23%
18	APARTMENTS	30,503	33,834	38,147	15,405	17,599	19,720	7,663	8,933	10,125	
	% Change Over Prior Period		11%	13%		14%	12%		17%	13%	33%
16	OFFICES	3,721	4,036	4,515	1,864	2,067	2,271	906	1,036	1,157	
	% Change Over Prior Period		8%	12%		11%	10%		14%	12%	4%
5	HOTELS/MOTELS	6,354	8,671	8,183	3,531	4,020	4,318	1,625	1,860	2,007	
	% Change Over Prior Period		36%	(-6%)		14%	7%		14%	8%	8%
	Occupancy Rate	77%	76%	76%	75%	72%	74%	69%	67%	67%	
16	RESTAURANTS	24,633	25,088	27,107	12,740	12,610	13,409	5,655	5,694	6,076	
	% Change Over Prior Period		2%	8%		(-1%)	6%		1%	7%	14%
	Gross Receipts Per Seat 1/	5,273	5,411	5,677	2,717	2,717	2,808	1,218	1,235	1,273	
32	MISC. RETAIL SALES	36,828	40,210	42,592	20,606	21,064	22,008	11,018	10,410	11,032	
	% Change Over Prior Period		9%	6%		2%	4%		(-6%)	6%	6%
9	BOAT SALES & BROKERAGE	7,339	8,492	8,793	3,855	4,817	5,213	1,582	1,840	2,026	
	% Change Over Prior Period		16%	4%		25%	8%		16%	10%	2%
4	FUEL SALES	1,340	1,836	2,324	734	1,061	1,302	302	480	535	
	% Change Over Prior Period		37%	27%		45%	23%		59%	11%	2%
	No. of Gallons (000's)	2,311	2,250	2,122	1,244	1,148	1,168	506	491	477	
5	YACHT & SOCIAL CLUB DUES	2,352	2,710	3,075	1,231	1,419	1,615	669	780	926	
	% Change Over Prior Period		15%	13%		15%	14%		17%	19%	5%
	No. of Members	4,140	4,524	4,886	4,372	4,589	4,999	---	---	---	
	MISCELLANEOUS CATEGORIES	7,518	12,576	10,973	4,212	6,954	6,060	2,087	2,964	2,924	
	% Change Over Prior Period		67%	(-13%)		65%	(-13%)		42%	(-1%)	3%
	% CHANGE OVER PRIOR YEAR:										
	~~LOCAL~~ AREA C. P. I. -RENT		11%	12%							
	LOCAL AREA C. P. I. -ALL ITEMS		18%	12%							

1/ Actual dollars

3/16/81 Rev.

MARINA DEL REY FACT SHEET

RECREATION, PUBLIC USE

Burton W. Chace Park--vista points, picnic shelters community building, fishing dock
Spectator events--regattas, crew races, boat parades, sailing races, park concerts
Public beach & picnic area
Sportfishing, harbor cruises, dock fishing
Boat rentals & sailing instructions
Fisherman's Village
Restaurants
Shopping centers and office buildings
Bicycle path
County Library with large nautical selection
Marina Information Center and Central Directories
North jetty promenade and view piers

BOATING FACILITIES

Capacity for 5,878 boats.
Beach launching area for hand-carried boats
Launching facilities for trailer-borne boats both by ramp and high-speed hoist
Dry storage of trailer-boats, mast-up dry storage
Yacht clubs, Pardee Scout Sea Base, varsity crews
Repair yards, fuel dock and pump-out station, live bait
Sailing lagoon for boats 12 ft., 1200 lbs. or less only
Boat sales and brokerage, charters
Transient (visitors) boat docks

RESIDENTIAL & TRANSIENT FACILITIES

3 hotels and 2 motels
16 apartment complexes

FUTURE DEVELOPMENT

Boat slips, hotels, parks, Information Center.

PRIVATE DEVELOPMENT OF FACILITIES TO DATE

Berths (5,878)	$ 9,500,000
Apartment units (5,886)	109,800,000
Hotels & motels (340 rooms)	7,000,000
Restaurants (28)	4,500,000
Commercial, inc. off. bldgs.	20,000,000
Yacht Clubs (7)	1,900,000
TOTAL	$152,800,000

ECONOMIC IMPACT ON AREA

Taxes generated by lessees provide significant tax revenue for County, City schools, special districts, etc.
Community with current population of 10,000
More than 200 individual businesses provide 6,000 to 8,000 jobs
Direct freeway access via Marina Freeway (Route 90)

STATISTICS

804-acre site (403 of water, 401 of land)
2,340 feet of off-shore breakwater
2 miles of main channel 1,000 feet wide, 10-15 feet deep
3 miles of side basins 600 feet wide, 10 feet deep
7-1/2 miles of concrete bulkhead
6 miles of landscaped roadways
All utilities underground

PUBLIC DEVELOPMENT OF SITE

	Amount
Federal Gov't: 50% of cost of dredging entrance and main channels, jetties and breakwater	$ 4,600,000
County Gov't: Site acquisition and clearance; remaining 50% of cost of main navigation features; 100% of cost of dredging and bulkheading mooring basins, filling moles, constructing mole roads, and underground utility ducts and water and sewer systems.	15,875,000
State Gov't: Loan to complete acquisition repaid from project revenues.	2,000,000
Bond Issue: Cost of dredging side basins, construction of bulkhead walls, underground utilities and other land improvements.	13,000,000
Motor Vehicle Fund: Perimeter roadways	775,000
TOTAL INITIAL COST	$36,250,000

INCOME

Revenue derived from leases (now approximately $7 million annually), services bond debt, pays operating expenses, and provides for replacement and improvements.

STATEMENT OF MELVIN SHORE, PORT DIRECTOR, PORT OF SACRAMENTO, CALIF.

Summary of Request

After an eleven year study, the Feasibility Report and Environmental Impact Statement for the deepening of the Sacramento River Deep Water Ship Channel has been approved by the Board of Engineers for Rivers and Harbors and will presumably soon be approved by the Secretary of the Army.

Construction planning then can be begun in fiscal year 1982. Accordingly, we ask that your Committee include in the general investigations appropriations in the budget the amount of $400,000 which we understand the Corps can beneficially expand during that fiscal year.

BACKGROUND

The Sacramento River Deep Water Ship Channel Project was completed in 1963. From a volume of 41,000 tons handled that first year, our 1980 volume was over 3,250,000 tons - a stimulating increase of forty-five percent (45%) over the 1979 total. The Corps' original Project Review estimated that over the 50-year study life of the project, the average annual volume of deep draft traffic would be 857,000 tons. The vitality and success of this project to date is well demonstrated by the extent that the projections have been exceeded. Attached at the end of this statement is a graph illustrating the unusual growth of this project. Note that based upon the Corps' projections, we should not have achieved the 1980 volume until the year 2060.

LOCAL SUPPORT

Local interests have tenaciously promoted the use of the Port of Sacramento. The facilities provided by the Port District for cargo handling represent an investment of over $45 million. Additional expenditures are under active consideration at this time. Its land holdings are master planned for further expansion as the needs require.

At public hearings in 1970 and in 1979, there were many expressions of support from the shippers that use the Port and the community in general. Nearly 100 letters were received after the 1979 hearing, from U.S. Senators and Congressmen to private citizens, the over-whelmingly majority were strongly supportive of the deepening project. The

Board of Engineers for Rivers and Harbors also received a large number of supportive letters, which we like to think contributed to the comparatively brief period of review received there before approval.

B.C. RATIO

The Corps' Feasibility Report shows that the deepening of the channel to Sacramento will produce a 2.5 benefit-cost ratio when evaluated at the interest rate of 7 1/8%. Recent updating using the higher rate of 7 3/8%, the benefit-cost ratio is 2.2. Typically, navigation projects have not shown well at these high interest rates which adversely affect the B/C ratio by tending to minimize annual benefits and exaggerate annual costs. The B/C ratio speaks for itself as to the value of this project.

NEED FOR DEEPER WATER

The bulk cargoes presently moving through the Port of Sacramento sorely require deeper water. Bulk cargoes require larger vessels to minimize the per-ton cost for ocean freight. To continue to successfully compete in the world markets, the Port of Sacramento shippers must be able to charter larger vessels with deeper drafts. To do any less makes them non-competitive and destroys their ability to foster our country's exports.

CARGOES REQUIRING DEEPER WATER

Just two of the Port's cargoes will serve to demonstrate the need. Last year 44% of the ships loading grain for export at Sacramento had to be topped-off at deeper water. When the Port started its wood chip export program in 1967, the ports at the receiving end had only 27 feet of draft capability. At that time Sacramento's 30 feet was ample. Now those same receiving ports offer 12 meters (over 39 feet) draft.

In both these cases, the long term picture can only mean that Sacramento will gradually be bypassed and eventually wither and die if deepening is not accomplished. It should be pointed out that these exports contribute to helping solve the continuing United States balance of payments problem.

ADDITIONAL VALUES

Deepening the channel will also serve the energy conservation needs of the country. When ships can be fully loaded at the Port, it will avoid the need to move cargoes to more distant ports by land transportation means. It is even more dramatically evident now in the 1980's that water transport is many times more fuel-efficient per ton of cargo than land transportation.

The needs of the national defense will also be better served by making the Port more accessible to naval and merchant marine vessels that require the deeper draft.

Finally, it should be recognized that the location of new industries along the ship channel with their private berths is a national asset of considerable value. The first of these industries has already located and is bringing fertilizers from Alaska to serve the agricultural needs of northern California.

SUMMARY

The Port of Sacramento has well demonstrated its success in utilization of the Sacramento River Deep Water Ship Channel at its present depth. Cargo handling developments in general and specifically at Sacramento clearly indicate the need for deeper draft to accommodate the larger ships handling bulk cargoes.

I respectfully urge your Honorable Committee to approve an appropriation of $400,000 to permit the Corps of Engineers to begin construction planning in an efficient and economic manner.

PILLAR POINT HARBOR PROJECT

STATEMENT OF JEAN FLOCKS, COMMISSIONER, SAN MATEO COUNTY HARBOR DISTRICT

Mr. LANGNER. Next is San Mateo County Harbor District, represented by Frank Lee, Jr., and Commissioner Jean Flocks.

Ms. FLOCKS. Mr. Chairman, my name is Jean Flocks. I am an elected commissioner and president of the San Mateo County Harbor District. I have submitted a formal statement.

I am here today to express the concerns of my constituents realtive to the development of Pillar Point Harbor. In 1961, the Corps of Engineers constructed the existing breakwaters and alter added a "dog leg" to correct a major surge problem. Unfortunately, the breakwater and "dog leg" did not provide needed protection. In a recent storm, 4 boats were sunk in the harbor and 16 were washed up on the beach. All in all, 121 boats have been beached or sunk since 1974. Most of the boats moored in California harbors are commercial fishing vessels, and this problem is further depressing in an already depressed fishing industry.

A system of internal breakwaters is desperately needed to prevent this problem. Speaking for the harbor district and the Commercial Fishermen's Association, I urge this subcommittee to assist us in obtaining funds to construct an internal breakwater system.

Thank you.

Senator SCHMITT. Thank you.

[The statement follows:]

STATEMENT OF JEAN FLOCKS, COMMISSIONER, SAN MATEO COUNTY (CALIF.) HARBOR DISTRICT

Chairman and members of the Sub-Committee, my name is Jean Flocks. I am an elected commissioner of the San Mateo County Harbor District and am presently serving as president of the Commission.

I am here today to express the concerns of the constituents of the Harbor District relative to the development of Pillar Point Harbor.

But first let me present some background information about the Harbor District and the Pillar Point Project.

The San Mateo County Harbor District is a County-wide Special District formed in 1933 to construct, maintain and operate harbor facilities within the county. Pillar Point Harbor, 319 acres in size, was created in 1961 when the Corps of Engineers constructed the existing outer breakwaters for the District, and added a "Dog Leg" to the west breakwater several years later to correct a surge problem. The District then constructed a pier for unloading and loading fish and other materials, a Harbor Master's Office, a concession building, warehouse and public restroom facility.

The breakwaters and "Dog Leg" as constructed did not reduce wave energy sufficiently to allow construction of berthing to accommodate recreational boats and commercial fishing vessels. It was concluded that a system of internal breakwaters would be necessary to provide wave and surge protection for the required floating dock systems and the boats moored within the marina basins.

In 1969 the Harbor District developed a detailed plan for development of Pillar Point Harbor. This plan was adopted by the District in 1970. In December of 1970 the District undertook to develop a portion of this plan referred to as the East Basin Project. Implementation of this plan was delayed and finally abandoned as a result of opposition from several environmental groups.

Since that time the District has considered many alternative schemes for developing the Harbor, ultimately adopting a final design in July, 1976. At that time this plan was considered to be the most acceptable compromise to the desires and needs of proponents, opponents and others connected with the development of the Harbor. The Central Coast Regional Coastal Commission denied the permit application submitted by the District for construction of the revised plan on the basis that the proposed project did not meet the requirements of the California Coastal Act of 1972.

An appeal was filed with the State Coastal Commission, which then approved the application subject to a number of conditions limiting the commercial (shoreside) development of the Harbor, e.g., restaurants, coffee shops and speciality shops. The plan as approved consisted of the following features:

Boat Berths	220 Commercial 220 Recreational
Area of Protected Water	38.5 acres
Length of Inner Breakwaters	3,290 Feet
Parking	700 vehicles
Launch Ramp	3 lanes
Car/Trailer Launch Ramp Parking	75 spaces
1-200 seat restaurant	
1 Chandlery	
1 Boat Repair Facility with Storage for 75 Boats	
Recreational Vehicle Parking Area	100 vehicles

Subsequent to the granting of the permit by the State Coastal Commission, three very important events occurred that had a disastrous effect on the project. First, the Corps of Army Engineers in response to pressure from environmental groups, determined that a public hearing should be held on the Corps permit application for the project. This hearing was held on March 17, 1977. Following the hearing it was decided that an Environmental Impact Statement (Federal) was required. This document was prepared, reviewed and commented upon, and finally approved in January 1979. The Corps permit was issued in July of 1979. The second event occurred when the State of California

Department of Boating and Waterways reduced the loan funds for the project from $6.0 million to $4.6 million dollars because of reduced financial feasibility. $500,000 in additional funding was provided via legislation making the total loan funding available $5.1 million dollars. The third event was the passage of Proposition 13 by the California voters in 1978. This reduced annual tax revenues available to the District for capital construction from $1.7 million dollars to approximately $550,000.

Because of the protracted delays in implementing the construction program, project costs have continued to escalate while funding remains static. Today, the greatly reduced project will cost in excess of ten million dollars. Ironically, the original Pillar Point Project which would have provided facilities for 2,000 boats, many shoreside restaurants, shops and other facilities could have been constructed for $5.2 million dollars.

The Harbor District recognizing that additional funds would be needed to complete the Pillar Point Project, entered into discussions with the Corps of Engineers to determine if Corps local small project funding could be utilized to construct the commercial basin portion of the breakwater. By this method an additional $2.0 million dollars of Federal funds would be made available for the project.

At the present time the Corps is pursuing the long, involved study procedure to determine the feasibility of breakwater construction, cost ratios etc., and it is conservatively estimated that this process will take until 1983 to complete. At that point the battle for funds will commence and there is no certainty that it will be a quick battle.

Meanwhile, gentlemen, the already depressed commercial fishing industry in San Mateo County will become more depressed because of a lack of facilities at Pillar Point Harbor. More boats will be driven ashore by the merciless southerly winds which have claimed 121 boats since 1974. A Harbor of refuge is supposed to be a haven for boatmen who come in from the open sea for rest and replenishment during major storms. As you can see, Pillar Point is marginal even as a harbor of refuge.

As President of the San Mateo County Harbor District speaking for the members of the Harbor Commission, the Commercial Fishermen's Association, Pillar Point Boat Owners' Association and the people of the Harbor District, I urge this Sub-Committee to consider the needs of these groups and assist them in obtaining funding for the Pillar Point Project in an expeditious manner.

Thank you.

STATEMENT OF GIL ANDERSON, REPRESENTING THE INTERNATIONAL BROTHERHOOD OF OPERATING ENGINEERS

Mr. LANGNER. Next, we have a representative of the International Brotherhood of Operating Engineers, Gil Anderson.

Mr. ANDERSON. Thank you, Mr. Chairman.

In 10 or 15 construction activities in northern California they not only think they are paying too many taxes, but one of the problems is the permitting process on dredging projects. One project took 60 permits to get a job started. I could pick any project. They are mired because of local redtape which could have been largely cut by the Corps. So, I would apprecaite if you would at least think about time limits on some way saying "No"; if you have problems with any of the agencies, you have between 15 and 30 days to get in a "no" answer, rather than no answer at all.

Senator SCHMITT. This is the Federal "no" that you are talking about?

Mr. LANGNER. Federal and State.

Mr. ANDERSON. You have to include the States. But the Corps can cut through some of those problems. All you have to do is delay a project 6 months and you have inflated the cost by probably 20 percent.

Mr. LANGNER. It is actually a flow diagram which is not at fault or being in error.

We have a final witness, Tom Powers, chairman of the board of supervisors of Contra Costa County.

Senator SCHMITT. It looks like what we used to call malfunction analysis.

SAN FRANCISCO BAY TO STOCKTON SHIP CHANNEL

STATEMENT OF TOM POWERS, CHAIRMAN, BOARD OF SUPERVISORS, CONTRA COSTA COUNTY, CALIF.

Mr. POWERS. Mr. Chairman, I have a written statement and filed it with your committee for the record.

We have eight projects and because of your budget constraints we have asked for no money in two.

One project I would like to mention is the San Francisco Bay to Stockton ship channel. There are several counties interested in this in central California. I stress your examination of that.

One additional project which appears small in our request is the Wildcat and San Pablo Creeks. It is a flood control program authorized many years ago. We finally have developed some local support in the way of funding, and we are asking you to give us $100,000 to examine further some alternatives that have been provided that would make that project less expensive.

Thank you for your time.

Senator SCHMITT. Thank you.

[The statement follows:]

STATEMENT OF TOM POWERS, CHAIRMAN, BOARD OF SUPERVISORS, CONTRA COSTA COUNTY, CALIF.

My name is Tom Powers. I am the Chairman of the Board of Supervisors of Contra Costa County, California.

The Board would like to express the appreciation of Contra Costa County and its citizens for the significant accomplishments in Public Works projects made possible by the foresight of your Committee in providing appropriations for flood control, water conservation and navigation projects. These projects have provided long-term benefits to the people of the County and are expected to continue to grow in importance in the future. We also wish to express our appreciation to the Corps of Engineers for their careful consideration of environmental problems based on the guidance issued by the Congress; we shall continue to cooperate with their efforts to execute projects in a manner that will preserve and enhance the social, economic, and environmental amenities in our County.

Contra Costa County presents testimony on eight projects that affect our area for funding in the Fiscal Year 1981-82 program. I request that our entire statement be entered in the record of this hearing.

ALHAMBRA CREEK

The Corps of Engineers has recently completed a detail study on possible solutions to the Alhambra Creek flooding problem. The report is currently being reviewed by the community. We request the project remain unfunded until they decide if one of the solutions should be implemented.

SAN FRANCISCO BAY TO STOCKTON SHIP CHANNEL
SACRAMENTO-SAN JOAQUIN DELTA SURVEY
SAN FRANCISCO BAY AND SACRAMENTO-SAN JOAQUIN DELTA WATER QUALITY AND WASTE DISPOSAL

These three projects dealing with navigation, water quality and delta levee stability are of considerable importance to our County as evidenced by our previous years testimony. We fully support these Corps of Engineers' projects and the recommended appropriations for Fiscal Year 1981-82. If the recommended appropriations are subsequently revised upward due to new developments, the County would favor the higher amount to provide for maximum progress toward completion.

WALNUT CREEK

The Corps of Engineers are receiving bids today for a two year contract to construct the next unit of this project. The work on Lower Pine and Galindo Creeks will eliminate a long standing flooding problem that has plagued residents of the County. We support funding of the $10,000,000 included in the President's Budget which is supported by the Corps of Engineers and the California Water Commission.

WILDCAT AND SAN PABLO CREEKS

This flood control project is needed to eliminate the almost annual flooding that occurs in the North Richmond area of our County. The existing depressed physical and socio-economic conditions of the area cannot be changed until the flooding situation is corrected. The original flood control plan developed by the Corps of Engineers proved too costly to implement, both in land and local funding. The County Flood Control District has been working with the Corps of Engineers to reformulate a more conventional plan. The new plan, developed by the district at a local cost of $60,000 reduces the total project costs for the lower reaches of the project from $18.7 million to $11.7 million, and specifically the local share of the project costs from $3.5 million to $1.5 million. Also at the local level we are retaining a consultant firm to prepare a draft EIR/EIS document to compare the two plans. Both plans will be presented to the community this summer. Due to the severe flooding problem with its impact on community rehibilitation and the significantly lower local costs, we believe the community will support the new plan. Consequently, we are requesting a Fiscal Year 1981-82 federal appropriation of $100,000 to provide the Corps of Engineers with funding to revise their design report and process the new Environmental Impact Statement once we have obtained community support.

WALNUT CREEK BASIN INVESTIGATION

The Walnut Creek Basin Investigation is a feasibility study to determine if drainage problems on eleven creeks in the Diablo Valley area of our County might qualify for federal flood control assistance. The study has never been completed. We are currently developing plans for several of these creeks at considerable local cost. We feel the changed environment since the study was started and the new plans being developed by the district have an excellent chance of yielding several economically feasible projects. We therefore request a federal appropriation in Fiscal Year 1981-82 in the amount of the Corps of Engineers capability of $90,000 to permit completion of the study.

PERIPHERAL CANAL ENVIRONMENTAL IMPACT STATEMENT AND ADVANCED PLANNING

The construction of the Peripheral Canal is very much in question in California as the project will be subject to a referendum decision in Fiscal Year 1981-82. We question the expenditure of any federal funds to prepare an Environmental Impact Statement or to perform advanced planning on a project that is subject to a referendum vote on its future. Consequently, we are against any federal appropriation in Fiscal Year 1981-82 for this project.

Thank you for the opportunity of giving this testimony.

SUMMARY

Project	Requested Amount Fiscal Year 1981-82	Remarks
1 - Alhambra Creek	-0-	We request this project remain unfunded until the community has reviewed the completed Study Report and has made a decision.
2 - San Francisco Bay to Stockton Ship Channel	$ 1,400,000	We support the President's Budget, Federal Capability, and California Water Commission's recommended appropriation.
3 - Walnut Creek	$10,000,000	We support the President's Budget, Federal Capability, and California Water Commission's recommended appropriation.
4 - Wildcat and San Pablo Creeks	$ 100,000	We request this project be funded to allow the Corps of Engineers to revise their design report to implement the County's modified plan.
5 - Sacrament-San Joaquin Delta Survey	$ 190,000	We support the President's Budget, Federal Capability, and California Water Commission's recommended appropriation.
6 - San Francisco Bay and Sacramento-San Joaquin Delta Water Quality and Waste Disposal	$ 255,000	We support the Federal Capability and California Water Commission's recommended appropriation.
7 - Walnut Creek Basin Investigation	$ 90,000	We request this project be funded to the Federal Capability of $90,000 to allow the Corps of Engineers to complete the Basin Investigation Study Report.
8 - Peripheral Canal Environmental Impact Statement and Advanced Planning	-0-	We request this project remain unfunded due to the referendum vote pending in California.

INTRODUCTION OF SUPPORTING WITNESSES

Mr. LANGNER. In deference to your request, Mr. Chairman, we have a number of other people we would like to introduce, some of whom will file statements for the record.

Less Westfall, president, Westfall Stevedoring Co.; Paul Hughey, manager, Contra Costa County Development Association; Emanual Gorland, executive director, Solano County Industrial Development Agency; and Kenneth Sampson of Orange County, who submitted a statement.

We also have from Ventura Port District, General Manager Gerald Barnes, and Edward Jenks, Ocean Services Corp. We also have Donald Riley from the Oceanside Harbor District; Gerald Pope of the Port of Oakland; Deputy Port Director Anthony Taormina, Port of San Francisco, and Eric Norgaard, consultant; president of the conference Edward Millan and general manager of the Port of Hueneme; Mayor Va Gill of the city of San Leandro and City Manager Leroy Riordan; Rod Lundin, president of Rod Lundin Associates; Michael Cheney, our dredging consulting engineer; Frank Boerger, consulting engineer; William and Dee Boland, Port Sonoma Marina; and Cheng Ben (Peter) Wang, president of Encinal Terminals, which is a proprietary public port.

STATEMENT OF ROBERT LANGNER, EXECUTIVE DIRECTOR, CALIFORNIA MARINE AFFAIRS AND NAVIGATION CONFERENCE

Mr. LANGNER. Mr. Chairman, I have submitted a statement with our recommendations. It does contain a summary of these requests.

Thank you for your courtesy today.

Senator SCHMITT. Thank you for yours and for the well organized set of presentations we have before us. Be assured, they will be studied by the subcommittee.

[The statement follows:]

STATEMENT OF ROBERT H. LANGNER, EXECUTIVE DIRECTOR, CALIFORNIA MARINE AFFAIRS AND NAVIGATION CONFERENCE

In my 23rd consecutive, annual appearance before you as C-MANC's executive officer, to present our witnesses and introduce in support of our projects and recommendations, it would be easy merely to update and repeat the material and facts, arguments and rationales, contained in my statements presented here since 1959.

More than ever, however, time and attention are precious, and with your concurrence, I will not indulge myself with a rehash of all of the reasons why we believe these California projects — a list of which is appended to this statement — should continue to receive your careful attention and favorable consideration. This Committee and its predecessors have heard extensively and with patience the tens of thousands of words with which we have expressed our needs and made our pleas. Despite this verbal bombardment, and reflecting inherent wisdom and a capacity to filter out redundancies — the Congress has been responsive for two-decades-plus in recommendations and actions which have benefited not only California but the nation. Stronger, more resilient, greater capability of logistics and security, a pace-setter in recreational boating and shallow draft navigation open to the ocean, the Golden State is the fastest-growing area of the United States in expanding our nation's vital international commerce.

Emphasized now and reflected in Congressional inquiries and proposed legislation are plans to accelerate the capabilities of certain U.S. port areas to accommodate larger bulk carriers necessary to transport more efficiently the soaring export of American coal. And — while not as rapid — there has been in the relatively recent past similar realization that our ports must also have capability to perform economically their function as pipelines for the growing volume of imported oil required to sustain this nation.

These and other anticipated, dynamic developments have been highlighted in our previous statements over the years. Navigation as fuel-efficient, cost-effective, environmentally-superior, security-essential, and water-related recreation — perennially the most popular — all have been subjects of our comments.

To rehash now for this knowledgeable body the fact, logic and rationales for these truisms would indeed be superfluous.

From the positive to the less so — or, "a revisit to regulatory jungle", similarly is inappropriate, since you are all most familiar with this "other side of the coin". In July, 1978, C-MANC presented to the House Port Caucus its "white paper", "The Regulation of Dredging: A Muddle Over Mud". Since then, the excesses of counter-productive regulations and their applications have not been ameliorated. Seeking regional relief, two similar efforts and documents have been presented for the benefit of the California Legislature and state agency officials, and while not within the immediate purview of this Committee, you are in agreement, we are sure, that the delays, frustrations, cancellations and major additional costs, have not boded well for these public works projects which are being considered here today. Repeatedly in the last year have been statements citing total annual costs of government regulations in excess of $100 billion — or more than is invested to make America productive through capital improvements. The negative implications of such figures need no exposition.

It is with the same restraint that the issues of user charges and fuel taxes on waterways, creeping down into deep water ports, is not dwelled upon now. While a convenient target and with numerically limited proponents, navigation interests largely represent the public. This nation was to a major extent explored, settled, developed and defended by means of navigable waterways and ports. More than ever, we need the efficiency and reliability which they afford our commerce, security and economic well-being.

At this time of apparent publicly-mandated action to cut government expenditures, balance the federal budget, bring inflation within reasonable bounds, and to revitalize our economy and competitiveness in the world, one might question the logic through which we appear here to seek to not only maintain but expand proposed expenditures in the coming fiscal year to carry out federal responsibilities which were originally dictated by the Constitution. If ports and commercial navigation are so efficient and important, critics say, why can't they "pay their own way"? Why should hard-pressed Treasury coffers have to be replenished at increasing cost with borrowed funds, only to be depleted again by "pork barrel" appropriations? Better than anyone, this Committee knows the true value of public works, and particularly, those involving navigation projects. In the two hundred-plus years of our nation's existence, it is difficult for this witness at least to cite another traditional federal responsibility, annually funded, which has reaped such major benefits for all. Regrettably, the modest proportions of Federal budgets allocated to the kinds of projects we espouse have steadily declined on a percentage basis. Fewer and fewer projects are initiated, the time it takes to plan and have them approved stretches into decades today, their initiation has become a matter of conjecture at best, and if when realized, they are at best reasonably maintained, and seemingly unworthy of improvement!

A rehash was promised to be avoided, although it may appear that this is a covert one in the philosophical sense. It is hoped that the preceeding repetitive summary of earlier themes was not excessive.

Our witnesses today and their Congressional hosts and supporters of our recommendations join me in appreciation to you for your customary hospitality and cordial reception here today. We hope that we have not worn out our welcome and will have opportunity to appear before you next spring, and at that time, express appreciation for your considered response to our request and recommendations. Thank you.

ADDITIONAL PREPARED STATEMENTS

Senator SCHMITT. The additional statements you mentioned will be made part of the record at this point, and any other statements submitted regarding California navigation projects will also be included at this point, if there is no objection.

[The statements follow:]

STATEMENT OF PAUL F. HUGHEY, GENERAL MANAGER, CONTRA COSTA COUNTY (CALIF.) DEVELOPMENT ASSOCIATION

My name is Paul F. Hughey. I am General Manager of the Contra Costa County Development Association, an official Economic Development Agency of Contra Costa County, California.

My organization would like to express our appreciation for the continued appropriations the Committee has provided to enable proper planning, design and a limited amount of construction for the San Francisco Bay to Stockton Ship Channel improvement project. This very important improvement is vital to the long range economic viability of the large area it serves. We also greatly appreciate the manner in which the Corps of Engineers is carefully considering the environmental impact of this project within the guidelines provided by the Congress. We approve of the careful analysis of environmental, economic and social factors as they relate to this project and we will cooperate fully in providing any information or assistance the Corps may require to enable proper judgement on initiating further construction.

Background

The Development Association filed a brief with the Corps of Engineers in 1958, requesting a study of the feasibility of improving the main shipping channel between San Francisco Bay and the Port of Stockton. As a result, the study was funded by the Congress under an appropriation sponsored by the late Congressman John F. Baldwin. This project, described in House Document No. 208 of the 89th Congress, 1st Session, was approved by the Congress in September 1965. As a part of this project, the San Francisco Bar has been deepened from 50' to 55' and the main shipping channel into San Francisco widened. Some minor additional construction was also provided near the Port of Richmond and on the levee system of the upper San Joaquin River. For the past few years, however, the Corps has been engaged in studies to enable it to prepare the Environmental Impact Studies required by law.

In order to expedite work on portions of this overall project, the project has been divided into five phases or sections. Commencing at the entrance to San Francisco Bay, Phase 1, the deepening of the San Francisco Bar to 55' has been completed.

Phase 2 consists of deepening the West Richmond Channel from 35' to 45' for a distance of approximately three miles to connect the naturally deep waters of San Francisco Bay and West San Pablo Bay. The corps is continuing preparation of the Draft GDM and EIS for this phase scheduled to be completed by January, 1982. The State of California, Congressman George Miller, the Contra Costa County Board of Supervisors, and local interests all support this phase of the overall project and it should proceed expeditiously. It will provide the needed deeper channel for the Port of Richmond which has placed its first container berth in operation, provide a better approach to the Chevron, USA, Richmond Refinery wharf, and provide a needed deeper channel for the U. S. Naval Fuel Supply Depot at Point Molate, near Richmond, and the bulk liquid facilities of the Port of Richmond at Point San Pablo. It is expected that construction funds will be requested in FY83.

Phases 3 and 4 consists of deepening the existing 35' channel through San Pablo Bay and lower Suisun Bay Channel to 45'. Corps model studies indicate that this phase will induce an increase in salinity levels in the Delta. Therefore, the Corps is prepared to continue further engineering and model studies on various types of underwater salinity barriers or sills in the Carquinez Strait to mitigate the effects of the project. The Corps has the capability of $600,000 for work on phases 2, 3 and 4.

It should be noted that the Commandant of the U. S. Naval Shipyard, Mare Island, has advised the Corps of Engineers that they have an operating requirement for a 36' channel. The San Francisco District of the Corps is preparing a draft EIS. This project will proceed with DOD funding.

Phase 5 consists of deepening the Stockton Channel and upper Suisun Bay Channel from the existing 30' to 35' from Point Edith, upstream of Martinez, to the Port of Stockton. This phase has all necessary permits and approvals and only awaits funding for commencement of construction. The Corps has the capability to the extent of $800,000 to commence construction of this phase.

The Economy

The San Francisco Bay is known throughout the world as one of the world's great harbors. In 1978, the latest year for which Corps of Engineers figures are available, some 56 million tons of cargo passed through the Golden Gate. Almost two-thirds of this total passed over the public and private docks of Contra Costa County and the Port of Benicia in adjacent Solano County via the existing John F. Baldwin Ship Channel.

All six of the petroleum refineries in Northern California, representing some 800,000 barrels per day of throughput, lie on this channel. Also on this channel is the world's largest sugar refinery, C&H at Crockett, importing almost 1 million tons of sugar each year. Steel plants, chemical plants, paper mills, a gypsum plant and expanding general cargo facilities, such as the electric power generating plants of the Pacific Gas and Electric Company are partially dependent upon shipment of fuel oil as they reduce the use of natural gas for boiler fuel. These two power plants alone represent some 30% of all the electric generating capacity in Northern and Central California.

Also served by this channel are three important naval installations; the Naval Fuel Supply Depot at Point Molate, near Richmond; the U. S. Naval Shipyard at Mare Island, Vallejo; and the U. S. Naval Weapons Station at Concord which is shifting to containerization which will require a deeper channel. The importance of a safe and adequate shipping channel to our Navy is obvious. It might be noted that the Corps does not include national defense installations in computing the cost-benefit ratio of projects.

Mr. Chairman, given the present serious energy problems, balance of payments, and inflationary economic situation, it would seem obvious that everything possible should be done to reduce transportation costs, improve efficiency, and minimize environmental impacts.

In 1979, some 1,200 tankers entered San Francisco Bay. Over 250 of these vessels had a draft of 35 feet or more which is the dock side depth of all of the petroleum refineries and terminals on the channel. These vessels have to anchor in South San Francisco Bay and have a portion of their cargo lightered off before they can proceed partially loaded to the refinery or terminal docks. This is an environmentally unsound practice, since it is known that the greatest risk of oil spillage occurs when it is necessary to transfer cargo. A deepening of the channel would enable these ships to proceed directly to their docks, thereby reducing time and transportation costs and reducing environmental hazard.

Conclusion

Mr. Chairman, the long-range viability of the San Francisco Bay Area regional economy is dependent upon the completion of this project. The last significant improvements to this main shipping channel were completed in the 1930's. The world shipping fleet has changed dramatically since that time. The ships are much larger in every respect and unless this channel is improved, the region cannot remain competitive to the detriment of our nation. Given the importance of international trade, the balance of payments and the very large sums collected in customs receipts by the San Francisco District each year, true national interests are involved.

We request the Committee to appropriate the amount of $1.4MM which is the Corps capability. In the event the Corps capability is adjusted upwards, we would request the higher amount to enable a more rapid conclusion to the scheduled work.

Mr. Chairman, we thank the Committee for its attention to our concerns. Thank you.

SUMMARY

Project	Requested Amount Fiscal Year 1982	
San Francisco Bay to Stockton Ship Channel (John F. Baldwin and Stockton Ship Channels)	$1,400,000	1) Commence Construction of Stockton Channel; 2) Continue preparation of draft GDM and EIS for Richmond Reach; 3) Continue hydrological studies of hydraulic salinity barrier for Baldwin Channel

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STATEMENT OF LAWRENCE M. BAGLEY, MAYOR, OCEANSIDE, CALIF.

I am Lawrence M. Bagley, Mayor of the City of Oceanside, California. I am most appreciative of the opportunity to be heard today and to testify on the need for Congress to provide $800,000 in this coming year's budget, which has been requested by the Corps of Engineers, to complete our harbor expansion study and to continue their harbor dredging project.

I realize that you cannot recall all of the innumerable projects that come before you, but as a reminder -- Congress, by passage of Public Law 87-9, recognized that the devastating erosion, which has plagued our City beaches and has resulted in millions of dollars in lost tourist revenue to Oceanside, is directly attributed to the construction of the Camp Pendleton Military Boat Basin in 1942. The Corps of Engineers has completed the Beach Erosion Study, and we will be appealing to Congress for construction funds in the near future. Meanwhile, shoaling of the harbor entrance is a constantly developing hazard due to the design of the Marine Corps Boat Basin and dredging is vital to maintaining harbor operations and restoring sand to the public beaches of Oceanside.

The harbor expansion study, which the Corps of Engineers has been working on for a number of years, will be completed with the allocation of $100,000.

We are asking you to provide the necessary follow-on appropriations for these two important projects.

ACTIVE NAVIGATION AND BEACH EROSION STUDIES
IN PROGRESS OR NOT STARTED

(Amounts in Thousands)

Compiled with the cooperation
of the South Pacific Division,
Corps of Engineers, USA

Study	Estimated Federal Cost	Approp Thru 30 Sep 80	FY 1981 Conference Allowance	FY 1981 Work Allowance	Balance to Complete	FY 1982 President's Amended Budget	FY 1982 Capability	Purpose of Additional Capability
			NAVIGATION IN PROGRESS					
Bolinas Lagoon	925	185	0	0	740	0	115	Resume study
Coast of Northern California (Harbors for Light Draft Vessels)	1,350	771	140	140	439	0	216	Continue study
Crescent City Harbor	690	85	220	220	385	200	200	No additional requirement
Humboldt Harbor and Bay	1,320	511	375	275	534	0	265	Continue study
Morro Bay Harbor	700	154	0	0	546	0	230	Resume study
North Coast of Los Angeles County	520	165	0	0	355	0	80	Resume study
Oakland Inner Harbor	490	100	200	200	190	130	130	No additional requirement
Oceanside Harbor	680	580	0	0	100	100	100	No additional requirement
Redondo Beach Harbor (King Harbor)	175	0	65	40	110	0	70	Continue study
San Francisco Bay and Tributary, Deep Water Ports	515	0	0	0	515	0	150	Initiate study
San Francisco Bay Area (In-Depth)	2,615	2,251	110	110	254	110	110	No additional requirement
San Francisco Harbor and Bay (Collection and Disposal of Floating Debris)	400	92	0	0	308	0	130	Resume study
San Leandro Bay	645	50	0	0	595	0	150	Resume study
San Pedro Bay Ports	1,120	315	325	325	480	480	480	No additional requirement
Sunset Harbor	790	385	100	100	305	150	150	No additional requirement
			NOT STARTED					
Coast of California (Storm & Tidal Wave)	7,000*	0	0	0	7,000*	0	750*	Initiate study
Santa Cruz Harbor	95	0	0	0	95	0	95	Initiate & complete study
West Newport Beach Harbor (Costa Mesa)	320	0	0	0	320	0	0	Awaiting Coastal Commission approval
			SHORELINE PROTECTION IN PROGRESS					
San Francisco Bay Shoreline	1,560	300	350	350	910	0	700	Continue study
Santa Barbara County	830	91	0	0	739	0	50	Resume study
			CONTINUATION OF PLANNING & ENGINEERING STUDIES					
Fisherman's Wharf	370	0	0	0	370	0	200	Continue planning and engineering
Oakland Outer Harbor	220	0	0	0	220	150	150	No additional requirement
Sacramento River Deep Water Ship Channel	1,250	0	0	0	1,250	0	400	Continue planning and engineering

Compiled with the cooperation
of the South Pacific Division,
Corps of Engineers, USA

ACTIVE NAVIGATION AND BEACH EROSION STUDIES IN PROGRESS OR NOT STARTED

(Amounts in Thousands)

ADVANCE ENGINEERING AND DESIGN AND CONSTRUCTION

Project		Estimated Federal Cost	Approp Thru 30 Sep 80	FY 1981 Conference Allowance	FY 1981 Work Allowance	Balance to Complete	FY 1982 President's Amended Budget	FY 1982 Capability	Purpose of Additional Capability
Bodega Bay	(N)	3,110							
(Precon Plng)		(586)	(431)	(0)	(0)	(155)	(0)	(155)	Complete planning
Crescent City Harbor	(N)	11,100 1/	1,478	200	200	9,422	1,720	1,720	No additional requirement
Los Angeles and Long Beach Harbors	(N)	29,600 1/	2,677	13,500	13,500	13,423	11,000	11,000	No additional requirement
Noyo River and Harbor	(N)	10,800							
(Precon Plng)		(1,200)	(520)	(160)	(160)	(520)	(240)	(240)	No additional requirement
Oceanside, San Diego County 2/	(SP)	3,000	0	3,000	3,000				
San Diego River and Mission Bay	(N&FC)	19,200 1/	11,335	250	250	7,615	250	250	No additional requirement
San Francisco Bay to Stockton (John F. Baldwin & Stockton Ship Chan)	(N)	166,000	8,559	850	850	156,591	1,400	1,400	No additional requirement

*C-MANC estimate.

1/ Cost estimate includes an allowance for inflation through the construction period.

2/ Special line item for FY 1981 only.

OPERATION AND MAINTENANCE PROJECTS

(Amounts in Thousands)

Project	Actual Obligations FY 1980	FY 1981 Conference Allowance	FY 1981 Work Allowance	FY 1982 President's Amended Budget	FY 1982 Capability	Purpose of Additional Capability
Bodega Bay Harbor	175	0	175	0	0	Harbor depths adequate for current use
Channel Islands Harbor	1,750	235	242	2,292	4,092	Dredge sand trap
Crescent City Harbor	2,096	1,632	247	1,347	1,347	No additional requirement
Humboldt Harbor and Bay	710	1,505	1,456	1,642	2,522	Dredge Bar and Entrance Channel (170); dredge Fields Landing and North Bay Channel (610); and update Environmental Impact Statement (100)
Los Angeles-Long Beach Harbors	697	1,088	19	0	0	Harbor depths adequate for current use
Los Angeles-Long Beach Harbors Model	298	82	107	100	980	Conduct model tests at Federal expense; normally be paid for by local interests
Marina Del Ray	0	0	1,100	0	0	Harbor depths adequate for current use
Morro Bay Harbor	1,400	649	62	0	2,000	Dredge entrance; Navy and south Morro Channel (1,400); and repair rock revetment (600)
Moss Landing Harbor	0	479	479	0	0	Harbor depths adequate for current use
Napa River	80	0	912	0	500	Dredge channel
Newport Bay Harbor	0	327	327	0	0	Harbor depths adequate for current use
Noyo River and Harbor	239	380	381	436	436	No additional requirement
Oakland Harbor	1,206	1,070	1,070	1,446	1,556	Boundary survey and monumentation

OPERATION AND MAINTENANCE PROJECTS (Amounts in Thousands)

Project	Actual Obligations FY 1980	FY 1981 Conference Allowance	FY 1981 Work Allowance	FY 1982 President's Amended Budget	FY 1982 Capability	Purpose of Additional Capability
Oceanside Harbor	0	650	1,040	0	700	Dredge entrance and Navy Channel
Petaluma River	507	0	0	0	1,500	Dredge across San Pablo Bay Flats
Redondo Beach Harbor (King Harbor)	0	250	250	0	0	Harbor depths adequate for current use
Redwood City Harbor	20	1,089	989	0	650	Dredging
Richmond Harbor	542	740	690	671	854	Dredge Inner and Outer Harbors
Sacramento River	1,680	2,706	2,495	2,637	2,637	No additional requirement
San Diego Harbor	0	540	65	0	0	Harbor depths adequate for current use
San Francisco Bay-Delta Model	1,686	451	457	513	1,238	Upgrade roads and parking areas (375); and upgrade visitor center exhibits (350)
San Francisco Harbor	751	1,437	48	1,987	1,987	No additional requirement
San Joaquin River	398	108	25	1,340	1,340	No additional requirement
San Leandro Marina	0	0	0	582	690	Dredge auxiliary channels
San Pablo Bay and Mare Island Strait	1,015	1,611	1,527	2,363	2,363	No additional requirement
San Rafael Creek	181	0	299	0	0	Channel depths adequate for current use
Santa Barbara Harbor	668	541	544	743	743	No additional requirement
Santa Cruz Harbor	530	675	675	595	1,155	Continue multi-year dredging contract (170); and seal west jetty (390)
Suisun Bay Channel	319	267	268	358	358	No additional requirement
Suisun Channel	0	51	51	619	619	No additional requirement
Ventura Harbor	430	534	1,065	1,142	3,142	Dredge sand trap (1,750); and design fixed sand bypass (250)
Drift Removal (S.F. Harbor and Bay)	1,255	1,198	1,203	1,426	1,426	No additional requirement

HARBOR EXPANSION STUDY

CITY OF OCEANSIDE
San Diego County
California

Total Estimated Federal Cost	Appropriation Prior to FY 1981	Allocation FY 1981	Balance to Complete	President's Budget FY 1982	Corps of Engineers Capability FY 1981
$680,000	$580,000	0	$100,000	$100,000	$100,000

PROJECT HISTORY & DESCRIPTION

In a combined effort undertaken in 1962 in cooperation with the U. S. Army Corps of Engineers, the City of Oceanside constructed the present small craft harbor adjacent to Camp Pendleton's Del Mar Boat Basin, sharing a common entrance. Designed to accommodate 559 boat slips and to provide a harbor of refuge, this project was also expected to permanently restore the City's attractive beach area to the South. Soon after the construction was completed, the City beach erosion problem became evident again and by 1965 was so severe that the beach was totally lost. Sand accumulation at the harbor entrance created such a hazard to navigation that the Corps of Engineers initiated dredging operations which were used to help mitigate the beach erosion. Annual dredging is now required to keep the harbor fully operative.

The harbor facilities have been increased to accommodate over 800 boats at this time. However, studies indicate an existing berthing deficit of over 700 slips for the Oceanside tributary area. The Corps of Engineers has undertaken a study to determine the advisability of utilizing the harbor's turning basin to accommodate present and future needs. The design would also help to ameliorate the shoaling problem at the entrance. The City has funded conceptual design planning for the expanded harbor area which is being used in the Corps of Engineers' study. The City urges an allocation of $100,000 for the completion of this very important project.

HARBOR DREDGING PROJECT
(Operations and Maintenance)

CITY OF OCEANSIDE
San Diego County
California

Total Estimated Federal Cost	Actual Obligations FY 1980	Estimated Obligations FY 1981	President's Budget FY 1982	Corps of Engineers Capability FY 1982
$ Continuing	0	$983,000	0	$700,000

PROJECT HISTORY & DESCRIPTION

Since its founding prior to 1900, the City of Oceanside has been noted for its desirable climate and ocean-related attractions, particularly the wide and expansive sandy beach adjacent to the downtown area. However, in 1942, the regular southward littoral drift of sand was interrupted by the construction of the wartime Del Mar Boat Basin and its jetty at the newly-established Camp Pendleton. By 1949, this interruption resulted in destruction of almost all of the Oceanside Beach. This problem has confronted the U. S. Army Corps of Engineers almost constantly since that time. In 1955, the Corps released a report concerning the severe erosion problem and proposed cooperative projects to replenish the sand on the Oceanside Beach. In 1956, the United States Government accepted the responsibility for creating the beach erosion and proceeded two years later to dredge 800,000 cubic yards of sand to be discharged on the Oceanside Beach. Recognizing dredging as no solution for the problem, the Corps conceived modifications to the Del Mar Boat Basin entrance which included construction of the Oceanside Small Craft Harbor and deposit of over 3,000,000 cubic yards of sand for restoration of the beach in 1962. The beach erosion problem soon returned requiring almost continuous annual dredging to maintain the common harbor entrance and improve the deplorable beach condition.

Dredging operations by the Corps in 1977-78 restored project depth to the Harbor and deposited over 300,000 cubic yards of sand on the eroded beach. Unfortunately, this 300,000 cubic yards, as well as more of the original beach were subsequently lost to violent storms and exceptionally high tides. Continuation of an effective dredging program by the Corps is vital. The City of Oceanside requests approval of the $700,000 required for fiscal year 1982 dredging.

Statement of Emanuel Gorland, Executive Director, Solano County (Calif.) Industrial Development Agency

My name is Emanuel Gorland. I represent the Solano County Industrial Development Agency. Thank you for the opportunity to present our recommendations on the navigation needs of our county and the Bay Area of which we are a part.

The economy of our County is partially dependent upon navigation. The largest port-oriented industrial park in Northern California is located at Benicia. The facility includes the privately operated Port of Benicia. Exxon Company, USA operates a modern 72,000 bbl. refinery in the industrial park. The Port is also a major import center of automobiles.

The crude oil supply for Exxon and five refineries in Contra Costa County across the channel comes largely by tanker. The total inbound and outbound tonnage for the areas between Richmond and Martinez is approximately 70% of the total shipping volume of San Francisco Bay and its tributaries. The tonnage is largely crude oil or finished petroleum products. The deeper channel will permit the use of larger tankers and will reduce the cost of transportation. We have an energy crisis, and as you know, much of our energy is supplied by petroleum. Much of the petroleum processed here is Alaska crude.

Solano County has all the sizable land area left on ship channel in California either in the Benicia Industrial Park or the Collinsville Montezuma Hills area. Pacific Gas & Electric Company has received preliminary approval of a site adjacent to the Sacramento River for a $3 billion, 1.6 megawatt coal fired power plant. Other developments are contemplated in this area which could create many jobs and require ship support.

Last year California produced an estimated $10 billion of agricultural products, many of which were shipped down the Sacramento and San Joaquin River and distributed throughout the world. The world-wide demand for these agriculture products is increasing each year. The improved channel will permit the use of modern bulk carriers up to 100,000 tons resulting in decreased costs in transporting the petroleum and farm products. It is therefore urgent that immediate progress be made in carrying forward the John F. Baldwin and Stockton Ship Channel project.

The federal government, and our state are imposing overly severe regulations upon maintenance dredging. While every effort must be made to improve and protect our environment, we believe that equal consideration must be given to the human elements - jobs and economic security for the family. Water oriented industry considering locations on the improved ship channel will provide hundreds of jobs including employment opportunitites for our minority citizens.

We fully support all California navigation studies, construction projects and operation and maintenance appropriations for California, proposed within the Corps. of Engineers capabilities for the fiscal year, 1981-1982. Thank you for the opportunity to make this presentation.

CALIFORNIA WATER RESOURCE DEVELOPMENT PROJECTS

STATEMENT OF SCOTT FRANKLIN, CHAIRMAN, CALIFORNIA WATER COMMISSION

Senator SCHMITT. Our next witness is Scott Franklin, chairman of the California Water Commission.

Mr. FRANKLIN. Thank you, Mr. Chairman.

I would like to make a couple comments before I call on our other witnesses.

The California Water Commission has some very serious concerns regarding the budget, as I know you have also. Unfortunately, we were not privy to the President's latest budget data when the commission made its recommendations. But the intent of the commission was to coincide with the intent of both the Senate, the Congress, and President in making reductions. We did, in fact, drop six projects, and probably would have dropped some more if, in fact, we had been privy to that information.

PROGRAM PRIORITIES

Therefore, the commission has for the first time set down some priorities. These priorities include the Santa Ana River project. This will provide flood protection for most of Orange County in southern California. That particular project, Mr. Chairman, if it doesn't move forward, there will be a tremendous loss of life and property in the future.

The next item is enlarging the Shasta Dam and Cottonwood Creek. These studies on enlarging Shasta and Cottonwood Creek must move forward rapidly. They are part of California's overall water plan and have good benefit-cost ratios.

The third item is the San Felipe project in the San Francisco Bay area. This project is presently under construction and funding is needed to correct underground water depletion in San Francisco.

Item No. 4 is the Sacramento and Stockton ship channels. You have heard testimony on both of those projects earlier. We are very supportive of those.

Item No. 5 is the Merced County streams. This is a flood control project that not only is needed to protect the community of Merced, but also Castle Air Force Base and Strategic Air Command facilities.

We also support the timely construction of Cucamonga Creek. And we support an investigation of removing the silt from behind Hansen Dam, as Congresswoman Fiedler earlier showed you. We thoroughly support funding of delta support studies and Suisun Marsh facilities on the Trinity River.

That concludes my statement, Mr. Chairman, and I would like to have the complete detailed statement made part of the record.

I will now introduce the rest of our representatives.

Senator SCHMITT. Please proceed. Your statement and the others will be made a part of the record at the appropriate place.

[The statement follows:]

STATEMENT OF SCOTT E. FRANKLIN, CHAIRPERSON, CALIFORNIA WATER COMMISSION

Mr. Chairman and members of the Committee: I am Scott E. Franklin, Chairperson of the California Water Commission, an official agency of the State of California. The Commission is composed of nine representative citizens from throughout the State who are charged by statute with representing State and local interests before this Committee.

I appreciate the opportunity to appear before you with the official recommendations of the State of California for fiscal year 1981-82 appropriations. As in the past, I am one of several California representatives planning to make a coordinated presentation. I will make a general statement highlighting our overall program and then introduce the various supporting representatives who will speak on behalf of specific projects.

As we enter this difficult era of the eighties, we still have visionary goals that make us optimistic about our future in the water resources field. Although we see before us a time of limitations and restrictions, we must not stop in our constant search for better and improved methods of using our finite resources.

We must concentrate our efforts carefully, selecting and managing those projects and studies that are most vital to our common goals, so that we may reap the greatest yield from our efforts.

1981 could be a dry year because of light runoff projected from a scant Sierra snowpack. However, due to storage capabilities in existing reservoirs, it is expected that California will make it through the coming summer in terms of an adequate water supply. We are not in a drought yet, but hydroelectric power production will be short about 25% of normal production due to the light projected runoff.

Energy is in critically short supply and new programs must be developed to find and utilize efficient, clean, and environmentally sound energy sources, and innovative projects such as small hydro, solar, geothermal, and cogeneration warrant your support for funds. For instance, we have encouraged installation of hydroelectric generators at existing facilities as one approach to our ever increasing energy needs. We, therefore, confirm our commitment to such programs now.

I feel California is unique in that the California Water Commission, the California Departments of Water Resources and Fish and Game work closely together to solve water storage and flood control problems in ways which minimize adverse impacts on fish and wildlife resources. Examples of water projects which protect or enforce these natural resources are the Suisun Marsh Protection Facilities, the Peripheral Canal and Buckhorn Mountain (Grass Valley) Debris Dam on the Trinity River.

The California Water Commission is concerned about natural resources and encourages creative water development planning which results in projects that balance economic development with the preservation of recreation, fish and wildlife.

The attached tabulation contains our specific recommendations, and I will mention a few of the projects which reflect our efforts to develop environmentally sensitive projects through extensive public participation.

The Commission supports the federal capability for the Cottonwood Creek Project which includes as project features, flood control, water supply, recreation, fishery enhancement and hydroelectric power potential. The Commission also is supporting funding for the Enlarged Shasta study. Increasing the capacity of Shasta Lake would provide additional flood control, water supply hydroelectric power potential.

We support the timely completion of the Cucamonga Creek and Walnut Creek flood control projects. The Santa Ana River poses one of the most serious flood threats in California possibly the nation, and we support early funding of Phase II studies for Alternative 6, the "All River Plan", including the acquisition of the 100-acre marsh at the mouth of the Santa Ana River.

The Commission reaffirms its support of joint federal-state efforts to cooperate in feasibility studies and planning efforts such as the Delta Support Studies, and the Environmental Impact Statement for the Peripheral Canal. We support funding of the federal share of the costs of construction of Suisun Marsh facilities as a protective measure for fish and wildlife resources. We support construction of the Grass Valley-Buckhorn Mountain Debris Dam on the Trinity River. The dam and assorted programs will provide stream rectification for the Trinity River Division of the Central Valley Project. We urge funding for Federal participation in these programs.

The Commission supports the concept of the San Luis Drain to maintain a salt balance in the westside of the San Joaquin Valley. Extension of the drain both to the north and south of Kesterson Reservoir is dependent upon reauthorization of the San Luis Drain.

The Commission supports adequate funding for the San Felipe Unit. The project is moving forward and any decrease in funding level will result in delays. It will increase the cost of the project. We support funding of the San Benito County Water Conservation and Flood Control District distribution system loan. This facility is an integral part of the San Felipe Unit.

We also support continuing construction of the Tehama-Colusa Canal.

The Commission supports appropriations for the San Francisco Bay to Stockton Ship Channel, the Sacramento Ship Channel and the San Francisco Bay and Sacramento-San Joaquin Delta Water Quality and Waste Disposal Survey.

The California Department of Water Resources (DWR) and the Corps of Engineers have approved a letter of agreement dated 3 February 1981, regarding the deepening of the Stockton and Sacramento Ship Channels. It provides that DWR will not object to the Corps completing construction work on the Stockton Ship Channel. If studies and tests to be conducted by the Corps determine that deepening the channels will cause a significant or measurable increase in salinity incursion, the Corps will conduct model tests of mitigation measures, including a sill in Carquinez Strait, and will recommend implementation of such measures and an allocation of the cost between the Stockton and Sacramento Ship Channel projects.

The Commission supports the funding of detailed engineering studies for deepening the Sacramento Ship Channel. The Commission supports funding for metering flows and water quality in the Bay as agreed to by the Corps and the State.

The investments made today will not only provide immediate benefits, but also savings for the future. The projects we can complete today will save billions of inflated dollars tomorrow and eliminate waste of our precious natural resources.

I urge this Committee to favorably consider our recommendations for appropriations for California's energy, flood control, and water resources programs in F.Y. 1981-82.

I would like to have my statement and the attached tabulation made part of the record. Now, with your permission, Mr. Chairman, I will present the other representatives.

FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82

(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	FEDERAL CAPABILITY	COMMISSION FINAL RECOMMENDATION
1.	Alhambra Creek Contra Costa	$ 23,000 (850)	$ (300)	(0)	(0)	Under Study
	Local interests will assess proposed alternatives before supporting additional funds.					
3.	Corte Madera Creek Marin	19,000	7,000	(0)	(0)	0
	Local interests are not able to finance their costs.					
4.	Cottonwood Creek Shasta	407,000 (11,200)	(5,275)	(3,000)	(4,200)	(4,200)
	State will contract with Corps to purchase water from this project. Issues involving acquisition of lands for wildlife mitigation, access to private lands for purpose of fish and wildlife studies, and acqusition of lands needed for replenishment of fish spawning gravels need to be resolved.					
5.	Cucamonga Creek San Bernardino	113,000	65,766	25,500	25,500	25,500
	State Supports appropriation of $5 for post-project fish and wildlife evaluation studies to begin in 1981.					

Amounts in parentheses () are for pre-construction planning.

FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82

(In Thousands of Dollars)

<table>
<tr><th>NO.</th><th>PROJECT & COUNTY</th><th>TOTAL FEDERAL COST</th><th>ESTIMATED COSTS THRU 9/30/81</th><th>PRESIDENT'S BUDGET</th><th>FEDERAL CAPABILITY</th><th>COMMISSION FINAL RECOMMENDATION</th></tr>
<tr><td>6.</td><td>Dry Creek (Warm Springs Lake)
Sonoma</td><td>274,000</td><td>201,987</td><td>20,800</td><td>36,000</td><td>20,800</td></tr>
<tr><td></td><td colspan="6">Fish and wildlife mitigation issues should be resolved as soon as possible.</td></tr>
<tr><td>7.</td><td>Goleta and Vincinty
Santa Barbara</td><td>37,200
(2,170)</td><td>(500)</td><td>(520)</td><td>(520)</td><td>(520)</td></tr>
<tr><td></td><td colspan="6">Commission support $15 for fish and wildlife planning and post project evaluation of mitigation.</td></tr>
<tr><td>8.</td><td>Merced County Streams
Merced</td><td>83,100
(5,700)</td><td>(4,456)</td><td>(1,244)</td><td>(1,244)</td><td>(1,244)</td></tr>
<tr><td></td><td colspan="6">Continued Commission support is contingent upon inclusion of a 2,800 acre wildlife easement area on lower reaches of Bear Creek.</td></tr>
<tr><td>9.</td><td>New Melones Lake</td><td>370,000</td><td>309,404</td><td>12,700</td><td>28,000</td><td>12,700</td></tr>
<tr><td></td><td colspan="6">The Commission reaffirms its position that the appropriations should be conditioned to provide that New Melones Reservoir shall be operated in accordance with the provisions of Decision 1422 of the State Water Resources Control Board. Commission urges expeditous acquisition of riparian habitat and flood easements downstream of the dam, and resolution of downstream salmon problems related to release schedules, flow, and temperature.</td></tr>
</table>

FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82

(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	FEDERAL CAPABILITY	COMMISSION FINAL RECOMMENDATION
10.	Pajaro River; Uvas Carnadero Santa Clara	940 (285)	(260)	(0)	(680)	Support
	Resources Agency 2/27/80 letter to Corps outlines State-federal mitigation program under which project can proceed. Commission supports such authorization.					
11.	Red Bank and Fancher Creeks Fresno	(42,730) (4,000)	(0)	(0)	(400)	Support
	Commission supports funding for continuing planning and engineering studies.					
12.	Sacramento River and Major and Minor Tributaries Several	11,900	11,322	200	200	200
13.	Sacramento River Bank Protection Several	96,000	42,367	3,400	3,400	3,400
	Resources Agency 2/27/80 letter to Corps outlines State-federal mitigation program under which project can proceed. Commission supports such authorization.					

FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82

(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	FEDERAL CAPABILITY	COMMISSION FINAL RECOMMENDATION
14.	Sacramento River, Chico Landing-Red Bluff Several	12,200	5,645	0	0	Under Study
15.	San Francisco Bay to Stockton Ship Channel	166,000	9,409	1,400	1,400	1,400

DWR and the Corps have approved a letter of agreement dated 3 February 1981, regarding the deepening of the Stockton and Sacramento Ship Channels. It provides that DWR will not object to the Corps completing construction work on the Stockton Ship Channel. If studies and tests to be conducted by the Corps determine that deepening the channels will cause a significant or measurable increase in salinity incursion, the Corps will conduct model tests of mitigation measures, including a sill in Carquinez Strait, and will recommend implementation of such measures and an allocation of the cost between the Stockton and Sacramento Ship channel projects.

The Corps should determine the Stockton Ship Channel deepening project's input on the dissolved oxygen problems in the San Joaquin River if any, and propose methods of mitigation if appropriate. We urge the Corps to complete an agreement with the Department of Fish and Game.

15A.	Sacramento Ship Channel	1,250	0	0	400	400

Based on the letter of agreement between DWR and the Corps dated 3 February, 1981, as described in "San Francisco Bay to Stockton Ship Channel" (Item 15), CWC supports the funding of detailed engineering studies for deepening the Sacramento deep water channel.

FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82

(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	FEDERAL CAPABILITY	COMMISSION FINAL RECOMMENDATION
16.	San Luis Rey River San Diego	22,000 (2,000)	(1,464)	(300)	(300)	(300)
17.	Santa Maria Levees Rehabilitation Santa Barbara	12,600	8,075	4,525	4,525	4,525
	Commission supports $25 for post project evaluation of fish and wildlife mitigation measures.					
18.	Santa Paula Creek Ventura	34,600	4,281	310	310	310
	Commission supports expenditure of $5 for fish and wildlife planning.					
19.	Sweetwater River San Diego	18,100	1,414	0	0	0
	Commission will support project if agreement among Corps, U.S. Fish and Wildlife Service, California Department of Fish and Game, and California Department of Transportation is negotiated and Congress authorizes mitigation measures.					
20.	Walnut Creek Contra Costa	77,500	26,226	10,000	10,000	10,000

FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	FEDERAL CAPABILITY	COMMISSION FINAL RECOMMENDATION
21.	Wildcat and San Pablo Creeks Contra Costa	12,800	1,110	0	0	Under Study

Project has been deferred due to lack of local interest.

23.	Morrison Creek Phase I Sacramento	2,200	(650)	(650)	(650)	Under Study
24.	Santa Ana River Main Stem Phase I Several	2,200	1,970	0	0	Support

Commission supports Alternative 6, the All River Plan including the preservation of the 100-acre marsh at the mouth of the Santa Ana River. Commission supports early funding of Phase II studies and allocation of $15 for fish and wildlife studies.

FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82

(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	FEDERAL CAPABILITY	COMMISSION FINAL RECOMMENDATION
	SURVEYS					
24A.	Alameda Creek (Upper Basin)	1,270	870	150	150	150
24B.	Cache Creek	1,400	0		300	Under Study
24C.	Calleguas Creek Ventura	1,665	915	150	150	150
	Commission supports the allocation of $15 for pre-project fish and wildlife studies in F.Y. 82.					
27.	Guadalupe River Santa Clara, Alameda	1,463	1,388	0	73	Support
	Commission has supported investigation. The Commission will support future funding after feasibility report is reviewed and approved.					
27A.	Hansen Dam Los Angeles			0	0	500,000
	Commission adopted a report dated March 6, 1981 recommending funding of a study to remove sediment and silt from Hansen Reservoir. The report recommends authorization of water conservation, recreation, and vegetative management functions. The Los Angeles District Corps of Engineers is preparing a reconnaisance report on alternative remedial measures. The City of Los Angeles by Resolution No. ___ supports the study. The California legislature is considering AJR 14 (Richard Katz) supporting the study. Fish and wildlife impacts will need funding. The Commission estimates a need for $500,000 for F.Y. 82.					

FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82

(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	FEDERAL CAPABILITY	COMMISSION FINAL RECOMMENDATION
28.	Los Angeles County Drainage Area Los Angeles	3,210	1,573	500	500	500

Commission supports $15 for fish and wildlife studies.

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	FEDERAL CAPABILITY	COMMISSION FINAL RECOMMENDATION
29.	N. California Streams Several	7,145	5,946	98	500	98

Commission feels the Colusa levee study and Russian River gravel mining study should be given top priority. The Garden Bar Reservoir study should be undertaken only if the investigation is funded at a level in excess of $175,000. Corps and U.S. Fish and Wildlife Service should define the fishery resource study program for the Russian River.

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	FEDERAL CAPABILITY	COMMISSION FINAL RECOMMENDATION
30.	Sacramento River and Tributaries, Bank Protection and Erosion Control Several	2,400	1,812	300	300	300

This investigation could serve as a vehicle to resolve some of the environmental issues surrounding bank protection work. The Commission supports adequate funding to ensure that the study is responsive to all issues including developing construction techniques and maintenance standards which will minimize adverse environmental impacts. Commission recommends completing survey in 1981-82.

FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82

(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	FEDERAL CAPABILITY	COMMISSION FINAL RECOMMENDATION
31.	Sacramento- San Joaquin Delta Several	1,750	1,516	190	190	190
32.	San Diego County Streams	2,089	1,899	0	200	0

If the investigation is funded, the Commission supports an allocation of $15,000 for fish and wildlife studies.

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	FEDERAL CAPABILITY	COMMISSION FINAL RECOMMENDATION
33.	San Francisco Bay and Sacramento-San Joaquin Delta Water Quality and Waste Disposal Several	7,145	5,238	0	255	255

San Francisco Bay and Sacramento-San Joaquin Delta Water Quality and Waste Disposal CWC supports $255 thousand for metering flows and water quality in the Bay as agreed to by the Corps and the California multi-agency letter of understanding.

FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82

(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	FEDERAL CAPABILITY	COMMISSION FINAL RECOMMENDATION
34.	San Francisco Bay Shoreline Several	1,560	650	700	700	700
	Commission support conditioned on a State-Corps letter of understanding that initiation of Phase II Studies will not begin until after review of Phase I studies, including an appraisal evaluation of tidal flooding in the Suisun Marsh. An Corps of Engineers-California Department of Fish and Game agreement has been executed regarding the relative benefits claimed for the protection of diked historic tidelands.					
35.	San Joaquin River Basin Several	6,855	4,691	1,240	1,240	1,240
36.	San Leandro Bay Alameda	645	50	0	150	150
37.	San Lorenzo River Santa Cruz	440	250	0	150	0

FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82

(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	FEDERAL CAPABILITY	COMMISSION FINAL RECOMMENDATION
39.	Santa Ana River and Orange County Riverside, Orange, San Bernardino	7,120	5,602	485	760	485
	Commission supports funding adequate to accelerate the investigation and supports an allocation of $15 for fish and wildlife studies at Lake Elsinore..					
39A.	Santa Barbara County Streams, Santa Barbara	1,280	559	150	150	150
	Commission recommends an allocation of $5 for fish and wildlife studies.					
40.	Walnut Creek Basin Contra Costa	810	574	0	90	Under Study
41.	Whitewater River Riverside	2,270	2,270	0	0	25
	Commission supports $25 for fish and wildlife studies.					

FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	FEDERAL CAPABILITY	COMMISSION FINAL RECOMMENDATION
41A.	Statewide Assessment of Flood Plain Managment in California		0	0	0	150
	Total			88,512		90,042

FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82

(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
	RECLAMATION PROGRAMS				
	Sacramento River Division				
43.	Tehama-Colusa Canal and Facilities Tehama Glenn, Colusa Yolo	212,000	165,590	11,091	11,091
44.	Tehama-Colusa Canal Distribution System Glenn, Yolo	51,000	40,563	7,950	7,950
45.	Tehama-Colusa Fish Fac. Red Bluff Recreation Tehama	21,016	20,854	0	0
46.	Permanent Operating Facilities Tehama Glenn	6,839	6,011	1,004	1,004

RECOMMENDATIONS
FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
47.	Corning Canal Relift Pumps, Safety Fencing and Automation of Tehama Colusa Canal Tehama	3,260	2,060	1,483	1,483

Commission supports $50 for fish and wildlife studies to improve fish screens at the Red Bluff diversion dam, study overall problems encountered by salmon at the diversion. Adequate funds should be expended in F.Y. 82 to provide fencing and other measures along the canal to protect wildlife and to construct a fish screen on the Corning Canal.

Auburn-Folsom South Unit

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
48.	Auburn Dam and Reservoir	1,179,252	228,109	2,841	2,841
49.	Auburn Powerplant Placer	183,705	8,200	0	0
50.	Auburn Powerplant Switchyard Placer	10,570	124	0	0

FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82

(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
51.	Recreation Facilities Placer	26,747	6,131	0	0
52.	Fish and Wildlife Studies		0	0	0

The Commission supports economic, environmental and fish and wildlife studies recommended by former Secretary Cecil Andrus.

The Commission opposes appropriations for construction of Auburn Dam until the following have been completed:

1. Congress has reauthorized Auburn Dam.
2. A memorandum of understanding or water service contracts for 75% of the water yield have been executed;
3. Water and Power Resources Service agrees to comply with provisions of Decision 1400 of the California State Water Resources Control Board;
4. The State has approved the design of the dam finally selected.

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
53.	Foresthill Divide (Sugar Pine Dam) Placer	50,450	35,956	1,426	1,426

FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
54.	Folsom South Canal	270,934	39,881	0	400
	Same conditions for Items 48 to 52.				
55.	Service Facilities		3,549	0	0
	San Luis Unit				
56.	San Luis Canal-Flood Protective Work and subsidence correction	48,200	28,996	9,800	9,800
57.	Other San Luis Facilities (O'Neill P.P. and San Luis Canal Turnouts) Several	26,716	26,723	500	500
58.	Relift Pumping Plants and Turnouts-Westlands WD Merced, Fresno, Kings	70,800	40,466	145	145
59.	San Luis Drain Several	225,000	46,104	4,700	0

FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
60.	Westlands WD Distribution System Several	220,000	159,705	400	0
61.	Westlands WD Drainage Collector System Drain Several	80,600	17,027	100	0
62.	Service Facilities Several		715	0	0

Since Water and Power Resources Service will have expended all funds allowed under the Westlands monetary authorization, the Commission reaffirms in general its opposition to additional funds for Items 59, 60, 61 and 62 until the following conditions have been met.

1. The features of the Unit are properly authorized by Congress.

2. The water service, distribution system, and San Luis Drain contracts with Westlands are amended to include the payment provisions recommended conceptually by the San Luis Task Force.

3. The Water and Power Resources Service agrees that the federal Central Valley Project and the State Water Project will be operated to meet the identical water quality standards in the Delta.

4. The Westlands Water District complies with Reclamation Law.

FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82

(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
	Miscellaneous Project Facilities				
63.	Delta-Mendota Canal Raise Lining and Rehabilitation Merced	74,849	71,961	988	988
64.	Friant-Kern Canal Rehabilitation and Betterment Work Several	95,700	95,103	365	365
65.	Trinity River	8,300	7,655	275	275
65A.	Trinity River Buckhorn Mountain Project Trinity, Humboldt	6,000		0	6,000

FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82

(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
	Trinity River Division				
65B.	Whiskeytown Powerplant Shasta	2,251	65	0	Support
	Commission supports adequate funding for mitigation of fish and wildlife impacts and development of a salmon and steelhead restoration plan for Clear Creek.				
	San Felipe Division				
68.	Pacheco Tunnel Continue Construction Merced, Santa Clara	82,546	58,503	12,018	12,018
69.	Pacheco Pumping Plant and Switchyard	40,820	3,138	3,670	6,470
70.	Pacheco Conduit	44,100	1,772	1,621	7,721
71.	Santa Clara Facilities Santa Clara	104,800	10,904	15,766	17,466
72.	Hollister Conduit	22,100	4,076	1,980	1,980

FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82

(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
74.	Other features Pre-construction Several		476	1,995	1,995

The Commission urges the Congress to provide that diversions of water from the Delta by the Water and Power Resources Service be subject to federally approved Delta water quality standards. The Commission affirms that it is desirable that the WPRS operation in the entire area conform to provisions of reclamation Law, including those provisions which relate to residency and acreage limitations.

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
74A.	San Benito County Water Conservation and Flood Control District San Benito	19,770	200	3,840	3,840

Other Projects

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
79.	Contra Loma Res. Rec. Facilities Contra Costa	124	124	60	60

Local sponsor matches federal funds

Washoe Project

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
79A.	Stampede Powerplant Nevada	3,192	1,996	975	975

FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82

(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
	Klamath Project				
79B.	White Lake Division Siskiyou	961	4	20	20
80.	Orland Project Safety of Dams-East Park Dam and Stony Gorge Dam - Glenn	10,608	3,784	800	800
81.	Coachella Canal Replacement (Lower Colorado Region) Imperial	47,037	47,029	1,500	1,500
	Commission supports expenditure of $1500 for wildlife mitigation measures and an additional $20 for resolution of the deer drowning problem if necessary.				
81A.	Santa Margarita (Lower Colorado Region) San Diego		0	0	Support
	Commission supports funding to update feasibility studies including $25 for fish and wildlife studies.				

FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
	Loan Program				
84.	Glenn-Colusa Irrigation District Glenn, Colusa	17,000	16,985	585	585
88.	Yolo-Zamora Water District Yolo		0	0	Support
	Issues relating to adequacy of a water supply and fish and wildlife mitigation measures need resolution.				
88C.	Colusa County Water Dist. Colusa	13,436	0	0	Support
88D.	Glide Water District Glenn	4,632	0	0	Support
88E.	Oakdale Irr. Dist Stanislaus, San Joaquin	13,815	0	0	0

FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82

(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
88F.	Yuba County Water Agency Yuba	28,236	0	0	Support
88G.	Ramona Municipal Water District San Diego	17,000	0	2,500	2,500
	Appraisal Investigations				
89.	Boca-Prosser Powerplants Nevada County	207	136	0	0
	Commission supported the investigation and supports early construction.				
90.	Red Bluff Diversion Dam Powerplant Tehama County	153	126	0	0
	Commission supported the investigation and supports early construction. Commission supports $50 for fish and wildlife studies identified under Items 43-47, Tehama Colusa Canal.				

FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
91.	Keswick Powerplant Enlargement Shasta County	117	112	0	0
	Commission supported the investigation and supports early construction.				
92.	Stony Gorge-East	139	135	0	0
	Commission supported the investigation and supports early construction.				
	Feasibility Investigations				
93.	Kellog Unit Reformation Delta Division Contra Costa	525	0	0	160

Commission supports funding of feasibility investigation of Los Vaqueros Reservoir and relocation of Contra Costa Canal intake.

State and WPRS have executed a memorandum of understanding dated December 12, 1980 regarding a joint investigation of the Las Vaqueros-Kellog project including relocation of Contra Costa canal intake. Commission supports $10 for fish and wildlife studies.

Senator SCHMITT. Now, Congressman Shumway, would you like to make a comment?

Mr. SHUMWAY. Thank you. I appreciate, Mr. Chairman, being able to just introduce some people from my district in California who are here in support of some very worthwhile projects. Representing San Joaquin County, Supervisors George Barber and Evelyn Costa and County Administrator Chuck Dixon and County Counsel Jerry Sherwin. Also, representing the city of Stockton, Calif., we have City Councilmen Arnold Rue and Tom Madden and City Manager Ray Cecil.

AUBURN-FOLSOM SOUTH UNIT

Mr. Chairman, my statement is already in the record and I don't want to repeat items in the statement. But I do want to call the committee's attention to two items which are of great importance to me in the area I represent. One is for Water and Power Resources Service studies on the Auburn-Folsom South unit of the Central Valley project.

Last December, the former Secretary of the Interior made a decision regarding the design of Auburn Dam, which design took into account the earthquake possibility of the particular area. Unfortunately, his decision came too late that the prior administration could not request additional fiscal year 1981 funds to complete the necessary studies for the water downstream, particularly the Folsom South Canal. Now EWPSR has submitted a request and that request is presently at OMB for a reprograming of $390,000 for fiscal year 1981 to complete those necessary studies. I would ask when that request comes before the subcommittee that you give it your approval so that that project might be completed.

If for some reason that request is not made or if the subcommittee cannot grant such a request, then I would ask the money in the Auburn-Folsom South be reprogramed or reallocated to allow these studies.

NEW MELONES DAM, CALIF.

Second, New Melones Dam, which is a project now completed in California, a necessary part of the Central Valley Project and one we are very anxious to fill to use to the maximum potential. We understand that the Secretary of Interior is shortly going to make his decision regarding the basin allocating interwater supplies from that structure. We would like the Water and Power Resources Service to be able to enter into contracts for water service as soon as the Secretary makes a decision, and we are, therefore, asking that part of the funds within the Central Valley Project be reprogramed and WPRS is going to make this request of the subcommittee so these studies can be completed in fiscal year 1981 and continue into fiscal year 1982 and be concluded.

Of the requests made, I would appreciate, Mr. Chairman, and other members, and other members, if you will give them your favorable consideration. Thank you.

Senator SCHMITT. Thank you, Congressman.

FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
94A.	Shasta Dam Enlargement Shasta	7,000	0	500	500
	State and WPRS signed 12/16/79 letter of intent to jointly study enlargement of Shasta Dam.				
96.	Ventura County Water Project Ventura	816	812	0	Delete
	Commission has supported the investigation. WPRS has no need for funding request until Phase II studies are authorized.				
	Special Investigations				
98.	Minor work in connection with completed projects Several	1,916	376	110	110
	Stanislaus River Division				
98A.	New Melones Studies	600		0	Support

FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82

(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
99.	Delta Support Studies Several	10,000	6,058	775	1,312
	Commission supports funds needed for the WPRS to catch-up in providing its share of the costs of these studies.				
99A.	Delta Corn Requirements Study - San Joaquin	150	0	0	50
	Funds of $150 for 3-year study will allow WPRS to equal State's contribution.				
99B.	Peripheral Canal Environmental Impact Statement and Advanced Planning			0	400
99C.	Suisun Marsh Facilities solano County	18,500	0	0	2,500
	State is nearing completion of initial facilities. Commission supports funding for federal participation.				
100.	Environmental and Interagency Coordination Activities, Mid-Pacific Region Several	9,642	7,109	475	475

FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82

(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
101.	Fish and Wildlife Management Study	827	571	475	475
103.	Geothermal Resources (Lower Colorado Region) Several	16,924	8,812	0	25
	Commission supports $38 for fish and wildlife studies.				
103A.	Geothermal Resources (Mid Pacific Region)	443	263	30	30
104.	Wind Energy Study Central California-Nevada	452	190	230	230
	Commission supports funding adequate to accelerate the investigations.				
105.	Technical Assistance to States	702	87	75	75
	Colorado River Salinity Control Project				
106.	Paradox Valley Unit	51,001	11,831	1,448	1,448

FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82

(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
107.	Grand Valley Unit	146,025	21,036	7,713	7,713
108.	Las Vegas Wash Unit Nevada	61,847	18,397	90	90
109.	Colorado River Water Quality Improvement Feasibility Investigations Multi-State	29,780	17,450	210	210
	Commission supports entire program. $210 is for California portion including $25 for fish and wildlife studies.				
110.	Central Valley Conservation Study			0	Support
	Commission supports preparation of a water conservation plan by Water and Power Resources as requested by Governor Brown in his July 18, 1980 letter to Secretary Cecil Andrus.				
111.	Water Management Study (San Felipe Service Area) Santa Clara, San Benito			0	100

FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82

(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
112.	Solar Energy Opportunities Study	453	40	0	130
113.	Energy Conservation Study	538		0	150
114.	San Francisco Bay Area Regional Water Reuse Study Several	2,600		0	150
115.	Lower Colorado River Water Conservation and Efficient Use program Several	2,700	445	600	600
116.	Palo Verde Hydropower Riverside	75	50	25	25

Local Agency will handle through Department of Energy

FEDERAL FLOOD CONTROL AND RECLAMATION PROGRAMS IN CALIFORNIA FOR FISCAL YEAR 1981-82
(In Thousands of Dollars)

NO.	PROJECT & COUNTY	TOTAL FEDERAL COST	ESTIMATED COSTS THRU 9/30/81	PRESIDENT'S BUDGET	COMMISSION FINAL RECOMMENDATION
117.	Water Conservation Opportunities Imperial Irrigation Dist. Imperial	840	505	265	265

Commission supports an allocation of funds sufficient to study the fish and wildlife imports i.e. loss of riparian habitat and effect on the Salton Sea.

	Total			113,999	119,401
118.	Department of Agriculture Agricultural California allocation Conservation Program.				901

$190,000 is for a nationwide appropriation. $4,830 is

STATEMENT OF DAVID KATZ, PRESIDENT, CALIFORNIA STATE RECLAMATION BOARD

Mr. FRANKLIN. Our next witness, Mr. Chairman, is Mr. David Katz, who is president of the State Reclamation Board of the State of California.

Mr. KATZ. Mr. Chairman, I am president of the California State Reclamation Board, a State agency with responsibility for furnishing required local assurances for Federal channel and levee projects in the Central Valley of California. We have a direct and continuing interest in providing an integrated and complete flood control protection by means of reservoir and channel and levee projects.

I have submitted a written statement for the record, and due to the limited time available I will only touch on the highlights of that report in my oral testimony.

SACRAMENTO RIVER BANK PROTECTION PROJECT

The Sacramento River bank protection project is valuable to the preservation of the great Sacramento River system. We are sharing the cost on a one-third State, two-thirds Federal ratio and strongly urge the approval of $3.4 million for this project.

COTTONWOOD CREEK, CALIF.

Construction on the Cottonwood Creek project, which is the largest uncontrolled tributary on the Sacramento River, would provide badly needed flood control benefits to the Sacramento Valley. Appropriations is badly needed for this project.

We would like to express our support for the Merced County streams project, the Sacramento River and major and minor tributaries project, and the New Melones Lake project.

SURVEYS AND INVESTIGATIONS

Several of the proposed surveys and new starts are also vital to California. Probably most important in our area is the Sacramento River and tributaries protection and erosion control study. Results of this study will provide necessary information for a comprehensive treatment for 312 miles of the Sacramento River. Funding for full Corps of Engineers capability of $300,000 is strongly recommended.

As indicated in our statement, which we have submitted for the record, we are in support of a number of projects I will not discuss in my brief presentation due to the time limitation. We would urge, however, full consideration be given to all recommendations contained in the written statement. And I would like to ask that the statement be made a part of the record as well as my testimony before you today. Thank you very much.

Senator SCHMITT. Thank you, and it will be part of our record.

[The statement follows:]

STATEMENT OF DAVID KATZ, PRESIDENT, CALIFORNIA STATE RECLAMATION BOARD

The Reclamation Board, as the State agency which furnishes required local assurances for Federal levee and channel projects in the Central Valley of California, respectfully submits this statement in support of appropriations of Federal funds for accomplishment of flood control works.

The Reclamation Board recommends and strongly urges appropriation of funds in the amounts listed in the summary. While all projects are important to the health, safety and well-being of Central Valley residents, the projects and the surveys described as follows are particularly ctitical:

I. Construction and Advance Planning -

A. Cottonwood Creek:

The project works, authorized in 1970, consist of two dams, with 2,000,000 acre feet of multipurpose storage. The 1979-80 flood season again indicated the need for control on Cottonwood Creek, the largest uncontrolled tributary of the Sacramento River below Shasta Dam.

The State will contract with the Corps of Engineers to purchase water from the project. Issues involving acquisition of lands for wildlife mitigation, access to private lands for purpose of fish and wildlife studies and acquisition of lands needed for replenishment of fish spawning gravels need to be resolved.

The Reclamation Board recommends appropriation of $4,200,000 in 1982 for the Cottonwood Creek Project.

B. New Melones Lake:

New Melones Dam was authorized in the 1944 and 1962 Flood Control Acts. Initial construction was started in 1966 with work beginning on the main dam and appurtenances in 1974.

The New Melones Lake Project is located on the Stanislaus River about 45 miles east of Stockton. The project, when completed, will provide flood control, irrigation, power, general recreation, enhancement of fish and wildlife, and other benefits. The project consists of a dam, lake and powerplant.

The project will provide flood protection to 35,000 acres of highly developed agricultural land along the Stanislaus River. In conjunction with other projects on the Lower San Joaquin River and Tuolumne River, it will materially aid in reducing flood stages along the Lower San Joaquin River and in the San Joaquin Delta.

The Reclamation Board recommends appropriation of $12,700,000 in 1982 to continue the acquisition of riparian habitat and flood easements downstream of the dam. This appropriation should be conditioned upon the provisions of Decision 1422 of the State Water Resources Control Board.

C. Merced County Streams:

This project, authorized in 1970, will provide flood protection for Castle Air Force Base, the City of Merced and adjacent suburban and agricultural lands at an estimated Federal cost of $73,400,000. Funds are required in 1982 to continue the pre-construction planning. The project is contingent upon inclusion of a 2,800 acre wildlife easement area on the lower reaches of Bear Creek.

The Reclamation Board strongly recommends an appropriation of $1,244,000 in 1982 for the Merced County Streams Project.

D. Morrison Creek - Phase I:

A study of Morrison Creek and its tributaries was authorized in 1963. The study area includes Morrison Creek, its principal tributaries which are Elder and Laguna Creeks and various smaller streams. Runoff from the stream group area drains into the Sacramento - San Joaquin Delta. The drainage area includes portions of Sacramento and adjoining suburbs, the communities of Elk Grove and Florin and important military establishments.

State authorization requires assurances from the County of Sacramento, which have not been received. The County of Sacramento is in the process of establishing flood plain management along portions of the Morrison Creek Stream Group. In addition, the County has purchased some property within the project area for park purposes. These two actions have caused substantial changes in the original authorized plan. The Reclamation Board supports appropriations that will permit necessary project reformulation.

E. Sacramento River and Major and Minor Tributaries:

Improvement of Sacramento River Major and Minor Tributaries was authorized in 1944 and further amended in 1950. This project provides for revetment for protection of bypass levee slopes against erosion. The bypass levee revetment features of the project will provide protection to flood plains adjacent to the bypasses and will decrease requirements for levee repairs under emergency conditions.

The Reclamation Board recommends appropriation of $200,000 in 1982 for this project.

F. Sacramento River Bank Protection:

The project, authorized in 1960, is a long range, Federal - State effort, aimed at preserving the existing project levee system of the Sacramento River. These existing levees, which offer flood protection to the Central Valley over a reach of 185 miles, are very old and they are subject to constant erosion. The Sacramento River Bank Protection Project work consists of sloping and placing stone protection at those points which are identified each year as the most critical. Since 1963 some 612,000 lineal feet have been strengthened in this fashion. On this project all costs are shared with the Federal Government paying two-thirds and the State one-third.

The Resources Agency by letter dated February 27, 1980, outlined the State and Federal mitigation program under which the project can proceed. Federal authorization of this mitigation program is necessary before the Sacramento River Bank Protection Project can continue beyond Unit 36.

The Reclamation Board recommends approval of an appropriation of $3,400,000 for 1982 for the Sacramento River Bank Protection Project.

G. Sacramento River - Chico Landing to Red Bluff Project:

This project, authorized in 1958, comprises extension and modification of the existing Sacramento River

Flood Control Project by the construction of bank protection and minor channel improvements along the Sacramento River between Chico Landing and Red Bluff.

The Board is reluctant to participate in future units of this project until the Sacramento River and Tributaries Bank Protection and Erosion Control Investigation is completed.

The Board will consider refunding for the Chico Landing to Red Bluff Project, provided it can be demonstrated that specific sites would have a detrimental effect on the Sacramento River Flood Control Project if the bank protection work is not done.

H. Cache Creek Basin:

The Corps of Engineers has completed their Feasibility Report regarding water resources development in the Cache Creek Basin. The report recommends enlarging the outlet channel of Clear Lake and constructing a bypass channel to reduce flooding of development around the lake, enlarging and raising of levees around the existing settling basin near the mouth of Cache Creek to increase the basin's sediment storage capacity, and establishment of a National Wildlife Refuge in the existing Cache Creek Settling Basin at a total cost of $17,960,000.

This report states that a major flood problem exists along the rim of Clear Lake. Historical inflows to the lake, temporarily raise the lake level causing significant damage to lakefront development. Serious flood damages occurred in 1958 and 1970, causing estimated damages of $900,000 and $500,000 respectively. This problem can be economically solved by increasing the discharge capability of the lake's outlet channel.

Also, the storage capacity of the Cache Creek Settling Basin, which was constructed in 1937 to control sediment inflow to the Yolo Bypass of the Sacramento River Flood Control Project, is now nearly exhausted and sediment deposition from Cache Creek is again affecting the flood carrying capacity of the Bypass and the maintenance of downstream navigation and flood control works. The settling basin's storage capacity would be increased and a 3,600 acre National Wildlife Refuge would be established in the basin as a part of the National Migratory Bird Management Program.

Congress has not yet authorized this project; however, the $300,000 Corps' capability in Fiscal Year 1981/82 would enable the Corps of Engineers to proceed with design studies during this year. This would accelerate the project completion when Congress authorizes and funds the construction phase.

The Reclamation Board strongly supports authorization of the Cache Creek Basin Project.

I. Red Bank and Fancher Creek:

The Corps of Engineers has completed their Feasibility Report regarding water resources development on Redbank and Fancher Creeks, Fresno County. The report recommends single purpose flood control improvements on Redbank, Fancher and Pup Creeks and Alluvial Drain; and dual purpose flood control and recreation facilities on Big Dry Creek. The plan provides for enlargement of the existing Big Dry

Creek Dam and Reservoir, a new dam on Fancher Creek and detention basins on Redbank and Pup Creeks and Alluvial Drain.

The report states that significant flood problem exists in the expanding Fresno - Clovis metropolitan area. Flooding occurs throughout the study area along Redbank, Fancher, Big Dry, Dog and Pup Creeks and Alluvial Drain when channel capacities are exceeded. The most recent serious flooding in January and February, 1969, caused an estimated $4.7 million in damages to agricultural lands, residences and commercial and industrial properties.

The flood problem can be economically dealt with by construction of the proposed flood control features. Also, recreational features could be incorporated in the plan for enlarging Big Dry Creek Dam and Reservoir.

Congress has not yet authorized this project; however, the $400,000 Corps' capability in Fiscal Year 1981/82 would enable the Corps of Engineers to proceed with design studies during this year. This would accelerate the project completion when Congress authorizes and funds the construction phase.

The Reclamation Board strongly supports authorization of the Redbank and Fancher Creeks Project.

II. Surveys and New Survey Starts -

A. Northern California Streams:

This project, authorized in 1958 and 1962, is a study of all the streams in Northern California flowing into the Pacific Ocean, including the Sacramento River and its tributaries in regard to flood control measures. Throughout the years there have been many widespread and destructive floods. When flooding occurs, heavy damages are inflicted on homes, agricultural lands and public utilities. The cost of flood-fighting, clean-up and repair and restoration is usually several million dollars each time a flood occurs.

The flood events of the past demonstrate the continuing need for flood management measures in the basin and growing water requirements show the need for water conservation measures.

The Reclamation Board recommends inclusion of $98,000 for 1982 for the Northern California Streams.

B. Sacramento River and Tributaries - Bank Protection and Erosion Control:

This study, authorized in 1970, is an investigation of erosion problems along some 312 miles of the Sacramento River from Collinsville to Shasta Dam and along the lower reaches of the principal tributary streams.

The local interests believe that various factors, including reservoir control, have worsened erosion problems along the banks of the streams in the area. Assistance has been requested in providing needed bank protection. Also due to the greatly increased use of the Sacramento River by recreation boats, erosion by wave-wash has become a significant problem.

The study will consider protective measures to stabilize stream channels, reduce bank erosion and preserve riparian vegetation. This investigation could serve as a vehicle to resolve some of the environmental issues surrounding bank protection work.

The Reclamation Board strongly recommends an appropriation of $300,000 and also completion of the Sacramento River and Tributaries Study, Bank Protection and Erosion Control in Fiscal Year 1981/82.

C. Sacramento - San Joaquin Delta:

This study, authorized in 1950, is to determine the advisability of reclaiming certain tracts continually subject to inundation by tidal actions and to consider closing some channels to flood flows and navigational use in order to reduce levee maintenance.

The Sacramento - San Joaquin Delta consists of about 500,000 acres of highly productive agricultural lands segregated by interconnecting waterways into about 100 tracts. The entire Delta, which was reclaimed from swamps, is subject to tidal action. Many existing levees in the Delta are on unstable peat foundations that continually subside. There have been several major levee failures in recent years.

The Reclamation Board strongly recommends an appropriation of $190,000 in 1982 for the Sacramento - San Joaquin Delta Study.

D. San Joaquin River Basin:

This study, authorized in 1964 and initiated in 1968, encompasses the southern portion of the Central Valley, including part of the Delta - Central Sierra Area and all of the San Joaquin and Tulare Lake Basins. The study will investigate the problems of flood control, irrigation, municipal water supply, power, recreation, and fish and wildlife and water quality. The study area is the site of many complex water supply and water transportation problems. Flooding is a major problem in the study area. During the severe floods of 1969, the area experienced approximately $100 million in damages. Projects to be considered include: dams and reservoirs, stream diversion, bank protection and levee and channel improvement.

The Reclamation Board recommends appropriation of $1,240,000 in 1982 for continuation of this study.

U. S. Water and Power Resources Service

Auburn Dam:

Auburn Dam, part of the Central Valley Project, was authorized in 1965. Auburn Dam and Reservoir is located on the North Fork of the American River adjacent to the City of Auburn. The dam height when constructed will be 700 feet. Auburn Reservoir will have a capacity of 2,300,000 acre feet. The Reservoir will add 250,000 acre feet of flood control space to the American River system.

The population centers of Sacramento, North Sacramento, Arden, Brighton, Carmichael, Fair Oaks, Folsom and Rancho Cordova, lie partially within the natural American River flood plain. The present Folsom Dam and levee system does not provide adequate flood protection against a Standard Project Flood. The part of the metropolitan Sacramento area that would be flooded by the Standard Project Flood is estimated to have a population of about 130,000 people according to the 1970 census. Auburn Dam and Reservoir will provide additional flood protection to the population centers of the metropolitan Sacramento area.

The Reclamation Board urges adequate funding for planning activities, including studies to define appropriate fish and wildlife mitigation measures. These mitigation measures should be identified prior to initiation of final design. The level of funding was not determined.

The Reclamation Board opposes appropriations for construction of Auburn Dam until the following have been completed:

1. Congress has reauthorized Auburn Dam;
2. A memorandum of understanding or water service contracts for 75% of the water yield have been executed;
3. Water and Power Resources Service agrees to comply with provisions of Decision 1400 of the California State Water Resources Control Board;
4. The State has approved the design of the dam finally selected.

The Reclamation Board recommends appropriation of $2,841,000 in 1982 for planning activities which include studies to define appropriate fish and wildlife mitigation measures.

Shasta Dam Enlargement:

The State of California and the Water and Power Resources Service signed on December 16, 1979 a letter of intent to jointly study enlargement of Shasta Dam.

The Reclamation Board recommends appropriation of $500,000 for work on this study.

THE RECLAMATION BOARD
RESOURCES AGENCY
STATE OF CALIFORNIA

Corps of Engineers Project	Corps Capability	President's Budget	Recommendations 1982
	Summary of Recommendations (in thousands of dollars)		
I. Construction and Advance Planning			
Cottonwood Creek	($4,200)	($3,000)	($4,200)
New Melones Lake	28,000	12,700	12,700
Merced County Streams	(1,244)	(1,244)	(1,244)
Morrison Creek, Phase I, G.D.M.	(650)	(650)	Support
Sacramento River Major and Minor	200	200	200
Sacramento River Bank Protection	3,400	3,400	3,400
Sacramento River, Chico Landing to Red Bluff	0*	0	0
Cache Creek Basin Investigation	(300)	0	Support
Redbank and Fancher Creeks	(400)	(0)	Support
TOTAL	$38,394	$21,194	$21,744
II. Surveys and New Survey Starts			
Northern California Streams	300	98	98
Sacramento River and Tributaries Bank Protection and Erosion Control	300	300	300
Sacramento - San Joaquin Delta	190	190	190
San Joaquin River Basin	1,240	1,240	1,240
TOTAL	$2,030	$1,828	$1,828

Amounts in parentheses ( ) are for Pre-Construction Studies.
*Because of lack of State support, Corps has not shown its capability.

U. S. Water and Power Resources Project	U. S. Water and Power Resources Capability	President's Budget 1982	Recommendation 1982
Auburn Dam	Unknown	$2,841	$2,841
Shasta Dam Enlargement		500	500

SAN FELIPE DIVISION, CENTRAL VALLEY PROJECT, CALIFORNIA

STATEMENT OF ALBERT HENLEY, GENERAL COUNSEL, SANTA CLARA VALLEY WATER DISTRICT

Mr. FRANKLIN. Mr. Chairman, the next witness is Mr. Al Henley, who is general counsel for the Santa Clara Valley Water District, who is discussing the San Felipe Division.

Mr. HENLEY. The San Felipe Division includes not only Santa Clara Valley Water District, but three other public agencies in four counties. All four counties will be benefiting from purchasing San Felipe water. We are concerned with orderly construction continuing in that project.

I have a written statement which I have submitted for the record. I will be very brief and summarize the points.

Aside from our sense of urgency, which is very great and growing, especially in those areas that thought they could wait a while in Santa Cruz and Monterey Counties, we would also like to point out, of the $35 billion which the Western water councils had to take as cuts by the Reagan administration, which we are not objecting to we would point out, $10.6 million came from this one. We think it might be appropriate for the committee to consider whether that is a fair distribution of that burden.

The second point that I would like to make is that the administration has announced on a number of occasions that the principal criteria which it will use in making these cut—one of them was that there would be no delays in the urban water supply projects—other projects might be delayed, but urban water supply projects would be protected. This is an urban water supply project and it will be delayed. We again suggest the committee may wish to look at this in arranging some more equitable distribution of this burden.

I thank the chairman for this opportunity to testify.

Senator SCHMITT. Thank you.

[The statement follows:]

STATEMENT OF ALBERT HENLEY, LEGISLATIVE REPRESENTATIVE, SAN FELIPE COMMITTEE

My name is Albert Henley. I represent the San Felipe Committee, a confederation of local public agencies in four California Counties. These agencies will be the recipients, that is to say the purchasers under contract, of water from the San Felipe Division of the Central Valley Project.

We fully recognize and support the necessary effort to control federal expenditure. In our view, however, the reduction of the San Felipe appropriation so greatly below capability is an unfair distribution of the burden of funding cuts the new Administration proposes and is, we believe, the product of unfamiliarity with the project.

The San Felipe Division of the Central Valley Project is under construction; there is no question of abandonment, the project will be completed, put to use and -- through sales of water to us -- paid for.

The question before your Committee, Mr. Chairman, is of stretch-out or delay in that construction program.

It is our contention that slowing the work by pinching back appropriations is not in the local interest, nor the national interest, nor (and this is a principal point I want to make) within the guidelines and intent of the Reagan Administration.

It is not in the local interest because we need the water; we are behind schedule now and, even assuming normal rainfall, we already foresee a condition of inevitable groundwater overdraft before San Felipe water appears. It is not in the local interest because we are spending large borrowed sums to build transmission systems which will meet the federal turnouts. If the federal turnouts are late we will be left with unproductive facilities, that is, lines which do not produce the revenue we counted on to service the bonds we issued to fund them.

For example, one of our members, the Santa Clara Valley Water District, has underway at this time a $107 million locally-financed distribution and treatment program for domestic and industrial service which is predicated on scheduled deliveries of the federal water. Delays will cause considerable economic and supply hardship to this County, its 15 cities and 1.3 million citizens.

The problem faced by our members representing the Watsonville subarea in Northern Monterey and Southern Santa Cruz Counties provides another example of local need and interest. There a long-term condition of seawater intrusion is destroying the aquifers relied on by the residents. They had looked to wastewater reclamation as a source of supply which would permit them some delay in contracting for their San Felipe portion. It does not appear that federal funding for regional wastewater treatment plants is now expectable. Thus, they see early San Felipe availability as more necessary than ever.

Delay is not in the national interest because the cost daily escalates. Of course, this condition impacts upon us eventually as we must repay the swollen federal outlay. We are committed to the repayment by contract but the National Treasury will not begin being repaid until the system is operable.

Finally, delay in construction is not within the Reagan Administration's budget guidelines. The vastly disproportionate cut now proposed in the San Felipe appropriation for FY 81-82 (22.2% below capability as opposed to an average of 7.9 Service-wide) is simply the result, as we see it, of mistake.

The following is quoted from page 5-6 of the President's "A Program For Economic Recovery", February 18, 1981:

> "The Administration will propose an 11% reduction in the planned construction program of the Corps of Engineers-Civil, Water and Power Resources Service, and Soil Conservation Service.
>
> This reduction will not delay the realization of hydroelectric, municipal water supply, navigation, or urban flood control features, but will defer some less critical parts of projects such as the development of recreation areas and some rural flood control and irrigation deliveries." [Emphasis added]

The great majority of the San Felipe Division's production will in fact provide a "municipal water supply", and possible but limited "hydroelectric" energy. Any "recreation" potential is entirely incidental. No part of the appropriation is slated for use to develop "recreation areas".

We are convinced, in short, that this Division has been mistakenly perceived as an irrigation project. It is primarily an urban water supply project with a part of the supply under contract to agricultural areas. It therefore fits the definition of projects of which realization is not to be delayed under the Administration's proposal to you.

We appreciate the courtesy of the Committee in receiving this statement.

PAJARO AND GUADALUPE RIVER BASINS STUDIES

STATEMENT OF LINDA PERALTA, DIRECTOR, SANTA CLARA VALLEY WATER DISTRICT

Mr. FRANKLIN. Mr. Chairman, our next witness is Linda Peralta, who is the director of the Santa Clara Valley Water District, and Mr. Ronald Esau, assistant general manager.

Ms. PERALTA. Mr. Chairman and members of the staff, I will keep my comments brief also since we have submitted testimony.

The Santa Clara Valley Water District manages water supply and flood protection on a countywide basis in the Santa Clara Valley in big, beautiful California. Within our county's 15 cities reside approximately 1.3 million people. The population center is now the Nation's 17th largest, most rapidly growing city.

With regard to flood management, there are several projects of critical importance affecting the San Francisco Bay area, Santa Clara County in particular. Specifically, I refer to one construction project and two ongoing studies in the Corps of Engineers' civil program.

The Pajaro River study requires funding in the amount of $680,000 in fiscal year 1982. This is to complete design and initiate construction. This is a project involving construction of a single levee which would protect the urban area center of Gilroy. This project deserves high priority because benefits are exceptionally high in comparison to cost. In fact, the cost-benefit ratio is 3 to 1. Total Federal cost for the project is approximately $1.2 million. Nearly two-thirds of construction costs are being assumed by State and local agencies. The project will result in eliminating $23 million in damage from a single flood event. There is strong public support for this project locally.

The survey of the Guadalupe River, located in Santa Clara and Alameda Counties, is nearly complete and requires funding in the amount of $73,000. Over $1.7 million had been expended for this study and feasibility has been clearly established for protecting the central urban area of the city of San Jose. Flood damage potential is $61 million in San Jose alone. Under these circumstances, funding for completion of the study is highly justified.

SAN FRANCISCO BAY SHORELINE STUDY

Finally, Mr. Chairman, the San Francisco Bay shoreline study has been funded and underway for 3 years and requires an appropriation of $700,000 for fiscal year 1982. The completed study verifies the potential for damage in high flooding in Alameda, Napa, San Mateo, Santa Clara, Solano, and Contra Costa Counties at substantial risk to Federal, public, and private property in flood-prone areas around San Francisco Bay. Local and State agencies are working very closely with the Corps on this study. Adequate continuation of funding is respectfully requested. Thank you so much.

[The statement follows:]

STATEMENT OF LINDA PERALTA, MEMBER, BOARD OF DIRECTORS, SANTA CLARA VALLEY WATER DISTRICT

BACKGROUND

The Uvas-Carnadero Creek Project is located in Gilroy in the southern part of Santa Clara County, California. The Uvas-Carnadero Creek portion of the Pajaro River Basin Study was completed in August 1975. The proposed project is a single levee to prevent flood flows from entering the southern part of the City of Gilroy. In June 1976, a public meeting was held by the Corps of Engineers in Gilroy.

The Corps first received funding for the design phase of this project in FY 1979 and has received funding in all subsequent years. The Corps has completed a Draft Phase 1 General Design Memorandum which recommended a $3.2 million (Federal share $1.2 million) project with a benefit/cost ratio of 3.1 to 1. At a public hearing in Gilroy in February 1981 the community expressed strong support for the project.

The proposed project would protect about 600 existing homes, a high school and a number of commercial and industrial establishments from flooding.

To date $568,000 has been expended to study this flooding problem, and an economical solution is available quickly. While recognizing the national economic goals it is important that this critical flood protection be provided for the urban area of the City of Gilroy.

STATUS OF STUDY

The Corps has started Phase II of the General Design Memorandum, can complete design, and initiate construction of this needed facility in FY 1982 if the necessary funding is provided. Completion of construction would be in 1983.

RECOMMENDATION

Community development has long contemplated completion of this protection project. Given the high benefit/cost ratio this is a very efficient use of public funds. We, therefore, very urgently recommend an augmentation to the FY 1982 appropriation for the Corps of Engineers of $680,000 for award and initiation of construction of the Pajaro River: Uvas-Carnadero Creek Project.

BACKGROUND

Guadalupe River and Coyote Creek (one of the adjacent streams) are major waterways that flow through the highly urbanized area of Santa Clara County, California. Historically, these streams have flooded the downtown areas of San Jose and Alviso beyond local capability to prevent. For example, the estimated damages from a one percent or 100-year flood, which would inundate the urban center of San Jose, is $61,000,000. It is estimated that a 50-year flood would cause $33,000,000 worth of damage under existing conditions. The probability of such floods occurring before implementation of flood prevention measures is quite high. A 50-year flood has an 18 percent chance of occurring during a 10-year period; a 100-year flood has about a 10 percent chance of occurring during this same period. There is strong potential, therefore, that a damaging flood will occur before the problem can be resolved.

STUDY SYNOPSIS

In 1971, the community asked the Corps of Engineers to reactivate its 1945 study. The Plan of Study was completed in 1973. The initial problem definition and alternative screening was completed in 1974. More detailed problem definition and alternative definitions for the Guadalupe River and Coyote Creek were completed in 1978. The third phase, study of freshwater flooding in the Baylands, was completed in 1979. The stage 2 report has just been completed on the combined Guadalupe River and Baylands.

In an effort to accelerate the completion of this project, the local people through the Santa Clara Valley Water District have provided a substantial amount of technical and financial assistance since 1972. Special planning studies have been completed by the District for inclusion into the Corps' studies at a cost of over $300,000.

To date, therefore, over $1.7 million has been expended on this study. The necessity to reduce Federal expenditures to meet economic goals is recognized. Nevertheless, projects such as the Guadalupe River, where costly studies are nearly complete and economic feasibility has been established, should be adequately funded.

RECOMMENDATION

The very high flood risk and potential damage, the impacts of inflation, and the minor expenditure now required lead us to urgently request that

Congress appropriate the Corps' capability of $73,000 to complete the feasibility report for the Guadalupe River and Adjacent Streams Study in FY 1982.

BACKGROUND

The Bayfront areas of many of the San Francisco Bay counties have been adversely affected by land surface subsidence and, as a result, the lands, homes, business establishments, industries and military installations are subject to the hazardous inundation of tides from the Bay. In Santa Clara County alone, approximately 40 square miles of land surface area could be adversely affected. This area houses a number of Federal installations including the U. S. Navy, Moffett Field; and National Aeronautics and Space Administration's Ames Research Facility. Defense industries such as Lockheed, and many electronics, aeronautics and space firms are also located in the area.

The saltwater flooding problem is particularly acute in northern Santa Clara County where the threat of flooding is an annual concern. The potential of damage grows with each year. A combination of high tides, high winds, and moderate river flows can result in the overtopping of the inadequate, unsound, privately-owned levee system in this area. The community of Alviso is especially vulnerable to this flood threat.

STUDY SYNOPSIS

This Corps of Engineers survey was authorized by the 1976 Omnibus Rivers and Harbors Bill to examine the tidal flooding from San Francisco Bay. Funds were appropriated in FY 1979 and every year since and the study has been initiated by the San Francisco District office of the U.S. Corps of Engineers. Three public meetings have been held and the San Francisco District has retained a consultant to define damage potentials, and constraints, and to assimilate testimony taken at the public hearings in January 1979. The study also will insure integration of any flooding solution with protection of wetlands and wildlife refuges.

The results of this reconnaissance effort is a preliminary finding that all areas studied have a significant potential for damage from tidal flooding. The vital next step is an analysis of ways of dealing with the identified problems.

FY 1982 FUNDING

The Corps' reconnaissance study has established that a widespread danger of flood damages to federal, public and private facilities exists. Unfortunately, funds are not included in the President's budget proposal to continue these urgently needed studies. Local agencies have neither the resources nor the geographical scope to deal with this problem which affects the entire San Francisco Bay region.

RECOMMENDATION

We urgently request that the Committee recommend augmentation of the FY 1982 Corps of Engineers appropriation by $700,000 for this vital study.

SAN BENITO DISTRIBUTION SYSTEM LOAN

STATEMENT OF FRED ROHNERT, VICE CHAIRMAN, SAN BENITO WATER CONSERVATION AND FLOOD CONTROL DISTRICT

Mr. FRANKLIN. Mr. Chairman, our next witness is Fred Rohnert, vice chairman of the San Benito Water Conservation and Flood Control District.

Mr. ROHNERT. Mr. Chairman, we urgently request the approval in the Senate of $37.1 million which the Water and Power Resources Service has determined it can officially invest in the San Benito Division in 1982. We also request the appropriation of $3,840,000 as a second advance on the Public Law 130 loan agreement to initiate construction of the water distribution system in San Benito.

The contemplated allocated funds for the San Felipe Division are now cut over 25 percent, which is considerably more than other ongoing Western projects. We completely support the President's proposed program of Government expense reduction, but we firmly believe that the San Felipe project should receive its proportionate share of 1982 Western water development allocation.

SAN FELIPE DIVISION, CENTRAL VALLEY PROJECT

The total water requirement for the district, including two cities, is now totally dependent on wells, which are rapidly being depleted in spite of extensive water conservation measures. San Felipe water will not bring new lands into production, but is essential in maintaining the intensive agricultural economy of San Benito County, consisting of family farms. The farmers live on their farms and produce apricots, pears, prunes, walnuts, garlic, lettuce, onions, bell peppers, tomatoes, vegetable and flower seeds, and sugar beets.

The Pacheco Tunnel now has two-thirds of its 5.3 miles yet to be excavated. The funds we which request are necessary so that in the San Felpie Division they can be used for completion of the schedule in 1986. The payback to the WPRS can then be initiated at the earliest possible date.

Mr. Chairman, I have submitted a statement for the record and thank you very much.

Senator SCHMITT. Thank you, and it will be part of the record.

[The statement follows:]

STATEMENT OF FRED W. ROHNERT, VICE PRESIDENT/DIRECTOR, SAN BENITO COUNTY (CALIF.) WATER CONSERVATION AND FLOOD CONTROL DISTRICT, AND PRESIDENT, PACHECO PASS WATER DISTRICT

My name is Fred W. Rohnert. I am Vice-President - Director of the San Benito County Water Conservation and Flood Control District and President of the Pacheco Pass Water District. Mr. George Thomas, Manager of San Benito County Water Conservation and Flood Control District has accompanied me here today. I was born in San Benito County and have been engaged in agriculture there all of my life.

These two Districts have instructed me to urgently request the appropriations totaling $35,000,000 for Water and Power Resources Service facilities and $3,~~480~~840,000 for the initial water distribution sub-system to be constructed by the District as recommended by the California Water Commission. The $35,000,000 is for various facilities being constructed by the Water and Power Resources Service including the Pacheco Tunnel, Pacheco Pumping Plant and Switchyard, Pacheco Conduit, Santa Clara Conduit and Tunnel, Hollister Conduit and other features including Planning and Ground Preparation. The $3,~~480~~840,000 is the second advance on the P. L. 130 loan agreement of $19,900,000 which the San Benito County Water Conservation and Flood Control District has with the Water and Power Resources Service. This is for the purpose of constructing the water distribution system in Sub-area 001 of Zone VI, the zone of benefit for imported San Felipe water. The District is contributing $2,059,000 to the $21,959,000 cost of the distribution system.

We call your attention to the presently proposed budget for the San Felipe Division for 1981-82. This Division was cut approximately 30% from its original request which is considerably more than other ongoing projects in California. My Board of Directors completely support the President's proposed program of government expense reduction but they firmly believe that the San Felipe Division should receive its proportionate share of the final California allocation.

The Pacheco Tunnel has 2/3 of a mile of its 5.3 miles yet to be drilled. There are seven other ancillary systems to the San Felipe Division, all of which should be completed just prior to availability of water from the Tunnel. This will provide the earliest possible cash flow and initiation of pay back to the Water and Power Resources Service.

The water from the San Felipe Division is desperately needed to sustain an existing agricultural economy and community in San Benito County - Not bring new lands into production.

The zone of benefit (Zone VI) consists of family farms with the owners living thereon and the cities of Hollister and San Juan Bautista. This area now obtains its total water requirements by pumping from underground aquifers which are rapidly being depleted thru overdraft and water quality is deteriorating in quality. This condition exists even though water from Hernandez Dam (18,000 acre feet), Pacheco Dam (6,000 acre feet) and all treated waste water from Hollister and San Juan Bautista is being percolated into the underground.

Water use is increasing within the zone of benefit. Population has increased by 33% during the last 10 years according to the 1980 census with many new households. Agriculture is consuming more water thru production of increasing intensive crops. High water requiring crops such as garlic, lettuce, onions, bell peppers, tomatoes, vegetable and flower seeds and sugar beets are replacing apricots, pears, prunes and walnuts.

The declining water table and the instusion of water bearing toxic quantities of boron and chlorides have already caused a change of 13,000 acres of high quality land to low income hazardous dry farming techniques. These lands will be returned to intensive agriculture with the availability of San Felipe high quality water.

Land subsidence will be curtailed or perhaps eliminated by replenishing underground water storage thru percolation of San Felipe water into stream beds. This stored water will be available in such years when San Felipe water may not be available in the required quantity.

San Felipe water will replace municipal and industrial local water which is below public health standards because of high chloride content.

The construction of the San Felipe Division will supply sorely needed jobs in San Benito County with an unemployment rate of 20.7% as of January 1981. The annual average unemployment rate for the 1980 year was 14.3%.

San Felipe water will be supplied directly to 19,700 acres under pressure sufficient for sprinkler irrigation. The pressure will be mostly provided by the head efficiently developed by large capacity pumps which will lift the water from San Luis Reservoir 250 feet to the Pacheco Tunnel entrance. Fire control will also be augmented by this pressurized water. The remainder of the water needs will be supplied by San Felipe and local run off waters percolated into the underground thru stream beds.

The people of Zone VI (the zone of benefit within San Benito County Water Conservation and Flood Control District) thru plebiscite have overwhelmingly affirmed a contract with the Water and Power Resources Service to purchase water and to obligate themselves to borrow $19,900,000 thru a Public Law 130 loan to construct the necessary distribution facilities.

The California Water Commission has endorsed and supports the request we have made for the 1981-82 budget.

San Benito County urgently requires supplemental water as soon as possible to maintain the quality of life of its citizens by insuring the stability of its major industry -- agriculture.

We earnestly request the Congress of the United States to appropriate $35,000,000 as established by the Water and Power Resources Service to finance proposed work on the San Felipe Division Project for the fiscal year 1981-82.

We also request the Congress to approve $3,~~400~~340,000 as the second advance on an approved P. L. 130 loan to initiate construction of the San Benito County Water Conservation and Flood Control District Zone VI distribution system.

We thank the committee for granting us a hearing before you today.

Addendum: A report to the California Water Commission by its engineer Mr. Orville Abbott is attached to this statement.

SAN BENITO FLOOD CONTROL AND WATER CONSERVATION DISTRICT P.L. 130 LOAN SUMMARY

THE DISTRICT

The District includes all of San Benito County, California. The area to be benefited by the San Felipe Division of the Central Valley Project is in the northern part of the County. The benefited area includes the County's two largest cities, Hollister and San Juan Bautistia.

The District was organized in 1953 by an act of the California Legislature.

LAND

Irrigable Area:

The distribution system to be built with funds from the loan requested in this application will benefit about 48,200 acres considered the project benefit area, either by direct delivery by assuring the groundwater supply due to reduction of pumping by others, or by percolation. Of this total, 38,326 acres are irrigable.

Agricultural Land Use:

A Water and Power Resources Report, prepared for the Hollister Subarea in 1973, indicates the following percentage distribution of crops:

Field	4.4%
Forage	3.3%
Truck	38.7%
Fruits and Nuts	52.5%
Vineyards	1.1%
TOTAL	100.0%

There has been, and continues to be, a rapid conversion of orchards to truck crops, primarily tomatoes.

Land Ownership:

There are several excess land owners in the area to be served directly by the distribution system. These ownerships are less than 1000 acres each and it is expected the owners will comply with excess land provisions to qualify for service from the system. Also, in the area benefited by percolation, there are few property owners with excess land.

Boron Area:

Several thousand acres, once highly productive, have been heavily affected by irrigation with the high boron groundwater existing in that particular area. This area is expected to be restored with the use of San Felipe Division water.

WATER

Ultimate Requirement and Supply, Acre-Feet per Year:

	Agri	M & I	Total
Ultimate Requirement	84,290	12,000	96,290
Groundwater Yield (Without San Felipe Percolation)		53,750	
Groundwater Overdraft		360	
Cienega Valley Import		570	
San Felipe Supply		43,800	
San Felipe Losses		2,190	
Ultimate Supply			96,290

Quality:

The groundwater in an area of about 5,700 acres has boron of a greater concentration than 1.5 parts per million. This is the maximum level considered acceptable for agriculture in the area. The groundwater in the rest of the project benefit area varies in quality, but is generally considered acceptable for agriculture. Presently, groundwater is the sole source for M & I use, although hardness is a deficiency. Total dissolved solids are about 600 parts per million, with carbonates as high as 350.

PHYSICAL PLAN

Purpose:

The District plans to distribute water received from the WPRS, San Felipe Division of the Central Valley Project, so as to benefit 48,200 acres including the Cities of Hollister and San Juan Bautista. This benefit will be accomplished in some areas by direct distribution, in some areas by groundwater pumping reduction in or adjacent to the direct distribution area, and in some areas by percolation of San Felipe water.

Federal Facilities:

The WPRS will deliver water through the Hollister Conduit. This pipeline will be 19 miles long, beginning near the end of the westerly terminous of the Pacheco Tunnel and pipeline conveying water from the San Luis Reservoir. Water will be stored in the off season in the proposed San Justo Reservoir, with a capacity of 10,700 acre-feet.

District Facilities:

Planned is a closed pipe distribution system capable of delivering agricultural water at 60 pounds per square inch to about 20,000 acres with provisions to expand to an additional 2700 acres, and capable of delivering raw water to the Cities of Hollister and San Juan Bautista and to percolation points.

Agricultural Distribution:

Within the 20,000-acre distribution system area, a turnout will be provided for each parcel or group of parcels of 20 acres or more in size. Water will be delivered at a minimum pressure of 60 pounds per square inch. Design flows provide for exclusive surface distribution in some areas and conjunctive use with groundwater in some areas.

Municipal Distribution:

One direct delivery point will be provided for Hollister and one for San Juan Bautista. The cities will provide treatment.

Cost:

With a 7.5% per year allowance for cost escalation, the total project capital cost is estimated to be $21,959,000. This is to be financed with a P.L. 130 loan of $19,900,000 and a District contribution of $2,059,000.

Schedule:

The distribution system is scheduled for completion in December, 1984, and the Federal facilities are scheduled for completion in January 1986, with full operation of the system during the 1986 irrigation season.

COSTS

Water Purchases:

The District's water service contract with the United States provides that initial prices will be $16.50 for agricultural water and $61.00 for municipal and industrial water. The contract provides for adjustments in these prices for cost changes beginning in 1991 and each five years thereafter.

Pumping Power Costs:

The District hopes to purchase electrical energy for its pumping stations from the United States, but the loan application is based on the assumption that the power will be purchased from the local public utility. The current rate calculates to $4.80 per acre-foot for direct delivered agricultural water, $3.10 per acre-foot for direct delivered municipal and industrial water, and $1.70 for percolated water.

Federal Facilities:

Water and Power Resources Service estimates of operation, maintenance, and replacement of the Federal facilities are $4.00 per acre-foot.

District Facilities:

The cost of operation, maintenance, and replacement of the District facilities, with the exception of electrical energy, is estimated to be $2.70 per acre-foot.

AGRICULTURAL PAYMENT CAPACITY

Water and Power Resources Service estimates the District's agricultural payment capacity to be $50.00 per acre-foot.

SANTA ANA RIVER BASIN AND ORANGE COUNTY STUDY

STATEMENT OF CARL NELSON, ASSISTANT DIRECTOR, ORANGE COUNTY ENVIRONMENTAL MANAGEMENT AGENCY

Mr. FRANKLIN. Mr. Chairman, our next witness will be Mr. Carl Nelson, assistant director for the Orange County Environmental Management Agency.

Mr. NELSON. Mr. Chairman, I represent the board of supervisors of Orange County, Calif., where approximately 1 million residents occupy the floodplain below Prado Dam, a Federal project completed in 1941. Until 1970, these residents presumed that they were free from the flood hazard that existed prior to the construction of the dam. However, at that time in 1970, the Corps indicated that their studies showed that Prado Dam did not have the storage to protect against the standard project flood. Since that time, there has been completed a survey report, an environmental impact statement and phase I general design memorandum. In order that the $9 billion in damages shown in that report can be mitigated, we urge your committee to recognize the special Federal interest in this project and to find a way to authorize funding for the continuation of the studies and the phase II report so that the food hazard can be mitigated prior to the occurrence of another flood.

Thank you for the opportunity to appear.

[The statement follows:]

STATEMENT OF CARL NELSON, REPRESENTING ORANGE COUNTY (CALIF.) BOARD OF SUPERVISORS

My name is Carl Nelson. I am here today representing the Board of Supervisors of Orange County, California, in support of the Santa Ana River Main Stem project. The project's Phase I General Design Memorandum is now under review by the Board of Engineers for Rivers and Harbors.

The views of the citizens of Orange County and of the Board of Supervisors have been presented to the staff of the Corps of Engineers in the numerous public meetings held in our area. We certainly appreciate the breadth of public review offered by the Corps of Engineers and the opportunity for continued input to the lengthy proceedings which we trust will eventually lead to Congressional authorization for construction of the work needed to mitigate this devastating flood threat, which has been described as the worst in the western United States.

For nearly thirty years the residents of Orange County were content with a sense of security that Prado Dam and Reservoir provided the ultimate in protection from the perils of flooding which, from time to time, had visited the area prior to the 1941 completion of the project by the U. S. Army Corps of Engineers. However, in 1969 the first major floods to test the dam resulted in peak discharges of only 60% of the 9300 cubic feet per second design discharge rate. The sustained discharge of approximately 5000 cubic feet per second for a period of several weeks quickly revealed that the downstream channel improvements, installed entirely at local expense, were incompetent to confine the river to its manmade banks, and only with the help of the Corps under Public Law 99 was there avoided an escape of flood waters into the thousands of homes and businesses which had been developed across the coastal plain during the intervening years since completion of the federal flood control project. As a consequence of the tremendous channel erosion experienced during the floods of 1969, the Orange County Flood Control District embarked on a massive, locally funded program of grade stabilization and bank revetment to improve the capability of the Santa Ana River Channel in Orange County to resist the highly erosive flows discharged from Prado Dam. Between 1969 and 1981 approximately $25 million in property tax revenues for this purpose have been expended in the Santa Ana River for interim channel improvements.

Despite these expenditures, during the flood years of 1978 and 1980, additional large amounts of emergency assistance were requested and received from the U. S. Soil Conservation Service and U. S. Army Corps of Engineers to prevent the destruction and loss of levees, highways and bridges. Again, massive flooding from the controlled discharges from Prado Dam was narrowly averted.

Until the channel damaging flood of 1969, it had been assumed that Prado Dam and Reservoir had sufficient capacity for protection of the rapidly urbanizing central Orange County area. Then, concurrently with the locally funded channel improvement program, the Corps of Engineers' Los Angeles district office commenced a re-evaluation of the hydrology and reservoir regulation schedule for Prado Dam, and in 1970 began to discuss with local interests the probability that the dam could not control the runoff from a standard project flood, and that increased capacity would be needed both in reservoir storage and in downstream channel capacity. After this revelation it was not until 1975 that the review report and the environmental impact statement on the Santa Ana River Main Stem Project were completed. In the subsequent five years progress has reached the point of completing the Phase I General Design Memorandum.

As the impending threat of another great flood draws ever nearer, it is requested that the Congress of the United States recognize the special federal interest and the potential multi-billion dollar liability to the federal government in the event that a great flood should again occur prior to correction of the present deficiency in capacity of Prado Dam and Reservoir.

Thank you for the opportunity to appear before your committee and to present the enclosed March 3, 1981 Resolution of the Board of Supervisors reiterating its support for the "all river" plan and urging the Congress to act promptly in resolving this present flood hazard to thousands of residents of Orange County, California.

CUCAMONGA CREEK, CALIF.

STATEMENT OF DAVID McKENNA, MEMBER, BOARD OF SUPERVISORS, SAN BERNARDINO COUNTY

Mr. FRANKLIN. Mr. Chairman, our next speaker will be Mr. David McKenna, who is a member of the board of supervisors of San Bernardino County.

Mr. McKENNA. Thank you, Mr. Chairman and members of staff, for allowing us to appear. I would like to introduce C. J. Di Pietro, the control engineer for our district.

I would also like to express our appreciation to you for allowing us to appear today and talk about the Cucamonga Creek flood control project. We are here requesting your support in a timely completion of that project. We feel that the developmental pressures and growth of 25 percent-plus from Orange and Los Angeles Counties into the west part of our county, and in addition to that the tremendous fires we have suffered in the recent past, have caused an urgent need for completion of this project.

Also, we would like, along with Orange County, to support completion of the Santa Ana River study. The Santa Ana basin was also mentioned by Senator Hayakawa as an urgent study needed to be completed.

Senator SCHMITT. That has been reseeded by the fire burn?

Mr. McKENNA. It has been reseeded

Senator SCHMITT. Has nature cooperated?

Mr. McKENNA. Yes, so far the rains have been very cooperative, and it appears that it is going to mitigate a great deal of tremendous possibility for fire.

Senator SCHMITT. Please go ahead, Mr. Franklin.

Mr. FRANKLIN. I might add too, Mr. Chairman, the Governor has appointed a task force to look into the Chaparral fire that is occurring in that area so we can attempt to put an end to it by using a new thing the Forest Service uses called prescribed burning, where you go in and burn at different times of the year, and it looks like we will have the capability in the future to stop this particular sight. It looks very promising. I am a member of that task force, and there are two members of the San Bernardino County Board of Supervisors who are members on that task force.

Senator SCHMITT. Well, I hope you are successful and it can be used elsewhere. Prescribed burning has obviously been necessary for a long time.

[The statement follows:]

LETTER FROM ROBERT L. HAMMOCK, CHAIRMAN, SAN BERNARDINO (CALIF.) BOARD OF SUPERVISORS

March 26, 1981

U. S. Senate
Committee on Appropriations
Sub-Committee on Energy and Water Development
Honorable Mark Hatfield, Chairman

The Board of Supervisors of the San Bernardino County Flood Control District, State of California, appreciates the opportunity to submit the following flood control proposals for consideration in 1981-1982 Budget.

1.	Cucamonga Creek	$25,500,000
2.	Santa Ana River and Orange County Review Report	$ 485,000

These projects are within the capability of the U. S. Army Corps of Engineers and are recommended as urgent by the State of California. This Board considers these budgetary needs essential and urgent for local needs, and in the national interest as demonstrated by past floods.

Your approval will provide funding to maintain appropriate construction schedules for Cucamonga Creek, affording timely relief from destructive floods at critical upstream locations. It will expedite the Santa Ana River Report for urgently required flood protection in the Santa Ana River Basin, including San Timoteo Creek and tributaries in San Bernardino County.

This Board once again wishes to express deep appreciation for your past and present support of this program of priority concern to the County, to the State and Federal Government.

Respectfully yours,

ROBERT L. HAMMOCK, Chairman
Board of Supervisors

CUCAMONGA CREEK IMPROVEMENT

SAN BERNARDINO COUNTY, CALIFORNIA

The Cucamonga Creek Improvement Project is one of the most vital in Southern California. The project affords protection for the incorporated cities of Upland, Rancho Cucamonga, Ontario, Montclair, and Chino, all part of the rapid growth area immediately east of the Metropolitan Los Angeles area.

A potential for serious flood damage still exists along the tributaries of Cucamonga Creek. In the flood disaster of 1969, damages exceeded $12 million, with loss of life. In addition to residential, commercial and industrial damage, virtually every transcontinental highway, railroad, and interstate service traversing the area was damaged.

In more recent storms, such as February and March, 1978, the area was declared a disaster after sustaining millions of dollars in flood damages.

In February, 1980, San Bernardino County was again declared a disaster area as a result of flood damage from the January, 1980 storms which caused nearly $10 million in damages.

The current funding requirements of $25.5 million for FY 1981-82 will complete Phase VII (green) & Phase VIII (blue) and initiate Phase IX (red). This sum is within the capability of the U.S. Army Corps of Engineers and is included in the President's budget.

Colored in red is Phase IX, the final work remaining to complete this multi-million dollar flood control project which started in 1974. It consists of the completion of Deer Creek Channel, the construction of Hillside Channel, and their appurtenant debris basins.

SANTA ANA RIVER BASIN AND ORANGE COUNTY REVIEW REPORT

RIVERSIDE, ORANGE, SAN BERNARDINO

Flood control improvements of the utmost importance to San Bernardino County, in addition to projects previously constructed or currently under construction, are included in a survey for flood control entitled, Santa Ana River Basin and Orange County Review Report.

Included in these projects within San Bernardino County are the Santa Ana River Tributaries: Day, East Etiwanda and San Sevaine Creeks; Rialto Channel; Upper Warm Creek and Tributaries (Warm, Sand and Little Sand Creeks, Del Rosa Channel and Harrison Canyon); and San Timoteo Creek and Tributaries (San Timoteo, Zanja, Wilson and Wildwood Creeks).

The overflow from these major creek systems has resulted in over $50 million uninflated dollars in damages to property in the past few years. These flood flows have disrupted main fuel and communication lines, interrupted principle transcontinental highway and rail transportation routes and seriously damaged commercial, industrial and residential areas in the San Bernardino Valley.

The $485,000 recommended and included in the President's budget for FY 1981-82 will provide for the continuation of the survey which includes flood control projects in San Bernardino County as well as certain streams in other counties of the Santa Ana River Basin.

Santa Ana River Main Stem Phase I

The Santa Ana River Main Stem Flood Control Project, as recommended by the U. S. Army Corps of Engineers South Pacific Division Engineer, is vital to the entire Santa Ana River Basin of California.

The recommended plan provides for a Mentone Dam, assuring flood regulation from the mouth of the Santa Ana River downstream through San Bernardino and Riverside Counties to the existing Prado flood control dam and reservoir. This plan also includes a nominal modification to the existing Prado Dam and Reservoir, providing for its safety and added storage which, in combination with the Mentone Dam and improved channel through the downstream areas of Orange County, will afford badly needed flood protection to one of the major metropolitan areas of Southern California.

No additional funding is necessary at this time. However, your support of the ongoing program and early funding of Phase II Study will be greatly appreciated.

PROJECT CONSTRUCTION FUNDS

CUCAMONGA CREEK, SAN BERNARDINO COUNTY

PROJECT AUTHORIZED	Public Law 90-483, 90th Congress, 2nd Session, Approved August 13, 1968.
TOTAL CONSTRUCTION FUNDS REQUIRED: (1)	$ 133,000,000 (1)
PRIOR FEDERAL CONSTRUCTION FUNDS:	$ 68,566,000
CORPS OF ENGINEERS' CAPABILITY Fiscal Year 1981-82:	$ 25,500,000
STATE OF CALIFORNIA WATER COMMISSION RECOMMENDATIONS Fiscal Year 1981-82:	$ 25,500,000
PRESIDENT'S BUDGET	$ 25,500,000
REQUIRED ACTION:	Approval by Appropriations Committees and Congress of $25,500,000 in Fiscal Year 1981-1982 budget for construction of this urgently needed project for the protection of life and property in the cities of Upland, Ontario, and Rancho Cucamonga.

(1) Includes $20,000,000 non-Federal construction costs.

PHASE I GENERAL DESIGN MEMORANDUM

PLANNING AND ENGINEERING

SANTA ANA RIVER MAIN STEM FLOOD CONTROL PROJECT

PROJECT AUTHORIZED:	Public Law 94-587, Section 109, 94th Congress, 2nd Session, Approved October 22, 1976.
TOTAL PHASE I PLANNING AND ENGINEERING FUNDS REQUIRED:	$ 1,970,000
PRIOR PLANNING AND ENGINEERING FUNDS:	$ 1,970,000
CORPS OF ENGINEERS' CAPABILITY Fiscal Year 1981-1982:	No additional funds necessary at this time - support only.
STATE OF CALIFORNIA, WATER COMMISSION RECOMMENDATIONS Fiscal Year 1981-1982:	$ -0-
PRESIDENT'S BUDGET Fiscal Year 1981-1982:	$ -0-
REQUIRED ACTION:	Support ongoing program. No additional funding necessary at this time.

SURVEY FUNDS

SANTA ANA RIVER BASIN AND ORANGE COUNTY REVIEW REPORT

SAN BERNARDINO, RIVERSIDE, AND ORANGE COUNTIES, CALIFORNIA

SURVEY AUTHORIZED:	Review Report authorized by Resolution of the House of Representatives Committee on Public Works, adopted May 8, 1964.	
TOTAL SURVEY FUNDS REQUIRED	$ 7,120,000	(1)
PRIOR SURVEY FUNDS APPROVED 1965 Thru 1980:	$ 5,582,000	(2)
CORPS OF ENGINEERS' CAPABILITY Fiscal Year 1981-1982:	$ 760,000	
STATE OF CALIFORNIA WATER COMMISSION RECOMMENDATIONS Fiscal Year 1981-1982	$ 485,000	
PRESIDENT'S BUDGET Fiscal Year 1981-1982:	$ 485,000	
REQUIRED ACTION:	Approval of $485,000 by Appropriations Committees and Congress for continuing survey in Fiscal Year 1981-1982.	

(1) San Bernardino County Survey portions include Mentone Dam, San Timoteo Creek and tributaries (San Timoteo Creek-Loma Linda, Redlands Zanja, Wilson and Wildwood Creeks), Warm Creek and Tributaries, San Sevaine Creek and Tributaries, and Rialto Channel.

(2) Includes $425,000 previously allotted to Bureau of Reclamation. (Department of Water and Power Resources).

SANTA ANA RIVER BASIN AND ORANGE COUNTY STUDY

STATEMENT OF KENNETH EDWARDS, CHIEF ENGINEER, RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

Mr. FRANKLIN. Mr. Chairman, our next speaker is Mr. Ken Edwards, chief engineer of the Riverside County Flood Control and Water Conservation District.

Mr. EDWARDS. Mr. Chairman, on behalf of the Riverside County Flood Control and Water Conservation District, I wish to have the statement previously submitted incorporated in the record.

I would like to say in February 1980, southern California suffered some of the most damaging floods they have had in the last 30 years. We had within our district substantial damage along the San Jacinto River, Lake Elsinore, and Temescal Creek. Flood fighting accomplished by the Corps of Engineers on those three streams cost in excess of $4 million. Flooding around Lake Elsinore has caused significant loss to the economic base of that community.

LAKE ELSINORE FLOODING

Recovery from the loss is dependent upon developing a reliable flood control program around the lake. The President has recommended $485,000 to continue surveying the Santa Ana tributaries, which include the three previously mentioned streams. The Corps of Engineers has indicated they have the capability for $760,000, and I urge your committee to fund the full $760,000, as this will help speed the completion of the Lake Elsinore study.

WHITEWATER RIVER STUDY

I would also request the committee approve $350,000 for the Whitewater River that is in the desert area around Palm Springs. The Corps still needs to assess the environmental quality plan.

Senator SCHMITT. Your testimony indicates the level is the highest in the past 200 years, and it also says here higher than any historic level. I presume geologists have looked at that.

Mr. EDWARDS. As far as actual measured levels, we have 200 years of measured levels. As far as we can determine, we exceeded those levels.

Senator SCHMITT. You might have a geologist look at it and find out where the highest was.

[The statement follows:]

STATEMENT OF KENNETH EDWARDS, CHIEF ENGINEER, RIVERSIDE COUNTY (CALIF.) FLOOD CONTROL AND WATER CONSERVATION DISTRICT

SANTA ANA RIVER AND ORANGE COUNTY

In 1965, the Corps of Engineers was authorized to review flooding problems on the Santa Ana River, its tributaries and streams in Orange County. The primary effort of the Corps of Engineers has been on the main stem of the Santa Ana River for which the Phase I Advanced Engineering and Design Studies are now complete. The Corps is now working on surveys of the tributary streams.

In February 1980, the most devastating floods in recent history were experienced along the San Jacinto River, a major tributary to the Santa Ana River. Substantial damages were inflicted on the city of San Jacinto and surrounding areas from the failure of the San Jacinto River levee which had been designed and constructed by the Army Corps of Engineers in 1962. In addition to those damages, large areas of valuable agricultural, dairy and residential properties, which are unprotected from major flows in the river, were flooded, suffering major losses in crops, production, and direct structural damage. Major highways leading to the Hemet-San Jacinto Valley were flooded and washed out. Access to this valley with a population of about 55,000 people was limited for about 48 hours to one highway serving the area and even that route required traffic to drive through water 6 to 12 inches deep on Interstate 15E. Other damaging floods occurred along this stream in November 1965, December 1966, February 1969, and March 1978.

Lake Elsinore, which is a natural lake basin at the downstream terminus of the San Jacinto River, has risen to levels greater than any previous level recorded for the past 200 years. This has caused widespread damage to properties around the lake. It is estimated that about 283 homes and mobile homes located above the historic high water were damaged by continual rising water in the lake. The physical and economic damages to this small community are very large and the hardship being suffered by many people whose homes are affected by the rising water is immeasurable. This problem will remain for years because the outflow spillway channel from the lake through the town can only pass a relatively small flow, and high water levels in the lake reduce the amount of storage available for future flood events.

Temescal Creek in Corona experienced large flood flows in February 1980. Flood fight efforts by the Corps of Engineers prevented major damage to several industrial firms and a mobile home park. Even with this effort, damages in excess of one million dollars were sustained by private and public properties in Corona along Temescal Creek. Other damaging floods occurred along this stream in January and February 1969 and March 1978.

It is estimated that the Corps of Engineers, the Riverside County Flood Control District and other local agencies spent in excess of four million dollars in flood fighting efforts at these three locations in February 1980.

These streams are tributaries to the Santa Ana River and are all currently under study by the Corps of Engineers. The Corps has initiated studies of the critical Lake Elsinore flooding problem but will need substantial funding to complete this study as early as possible. The vitality of the economy of the Lake Elsinore community area is dependent upon a solution to this serious flooding problem. The Corps has also initiated studies for the extension of the San Jacinto River levee and Temescal Creek in Corona. Funding in fiscal year 1982 is needed to complete these important studies along with other studies in Orange and San Bernardino Counties.

The President has recommended an appropriation of $485,000. However, the Corps of Engineers has testified that the Los Angeles District has a capability for $760,000 and this level of funding is needed to accomplish an early completion of the

Lake Elsinore and San Jacinto River studies. I strongly urge that your committee recommend and the Congress approve $760,000 for Santa Ana River and Orange County surveys.

WHITEWATER RIVER

The studies the Corps of Engineers have made to date on the Whitewater River for flood control have not shown sufficient economic feasibility to warrant proceeding with a detailed project plan. This has been caused in large part by the placement of the Coachella Valley Fringe Toed Lizard on the threatened species list by the Department of Interior, Fish and Wildlife Service. One plan not yet studied in significant detail is the environmental quality plan. The Los Angeles District of the Corps of Engineers believe such a plan could overcome the environmental concerns of the other plans studied and still show economic feasibility. No funds have been included in the President's proposed budget. An appropriation of $350,000 would allow the Corps to continue that study.

DRY CREEK (WARM SPRINGS) LAKE, CALIF.

STATEMENT OF ROBERT BEACH, GENERAL MANAGER, SONOMA COUNTY WATER AGENCY

Mr. FRANKLIN. Mr. Chairman, our next witness will be Mr. Robert Beach, general manager of the Sonoma County Water Agency.

Mr. BEACH. Mr. Chairman, I am accompanied by County Supervisor Nick Esposti.

My comments are directed to the $20.8 million included in President Reagan's proposed budget for the Dry Creek (Warm Springs Dam) Lake project. This project has been under construction for several years and the $20.8 million included in the proposal will permit the completion of the dam. In spite of the fact this is $16 million approximately under the Corps' capability, funds were deleted which would have permitted the commencement of construction of the various recreational and cultural facilities associated with the project. The directors of the Sonoma County Water Agency recognize the need for reducing expenditures and the agency is prepared to bear its fair share of the consequences. There is one aspect of this reduction, however, which we feel will ultimately result in an increase rather than reduction. Of the depleted funds, $1.1 million was for a multilane launch ramp near the dam. This ramp will extend to the bottom of the water conservation pool. Under the current construction schedule, the embankment and associated outlets will be completed by November 1982. If this occurs, filling of Lake Sonoma could commence during next winter. This would result in the inundation of the ramp site. What we are asking for is restoration of the $1.1 million so that the ramp structure itself will be built in order to reduce the ultimate project cost and avoid delay in the reservoir becoming operational in the water supply.

I might add, the ramp would not be operational because the result would be it would be under water. But it would avoid future cost.

We appreciate the support this project has received, Mr. Chairman. Thank you.

[The statement follows:]

STATEMENT OF ROBERT F. BEACH, GENERAL MANAGER, SONOMA COUNTY WATER AGENCY

Mr. Chairman and members of the subcommittee, I am Robert F. Beach, general manager of the Sonoma County Water Agency (State of California) and here with me is Sonoma County Supervisor Nick Esposti. My comments today are directed to the $20.8 million included in President Reagan's proposed budget for the Warm Springs Dam-Lake Sonoma project in Sonoma County, Calif. This project has been under construction for several years and the Corps of Engineers believes that the $20.8 million included in the proposed budget will permit the completion during fiscal year 1982 of the dam embankment and the other structural elements of the project.

The $20.8 million represents a $3.6 million reduction from the amount proposed in President Carter's budget. Deleted were all funds which would have permitted the commencement of construction of the various recreational and cultural facilities associated with the project. The directors of the Sonoma County Water Agency recognize the need for reducing Federal expenditures and the agency is prepared to bear its fair share of the consequences.

There is one aspect of this reduction, however, which we feel has been overlooked, due to the time constraints under which the new administration reviewed the budget, which will ultimately result in an increase, rather than a reducton, in Federal outlays. Of the $3.6 million cut, $2.2 million was to have been spent to construct a marina and access road. Of this $2.2 million, $1.1 million was for a five-lane boat launch ramp near the dam. This ramp will extend to the bottom of the water conservation pool. The contract for the construction of the dam embankment calls for completion in April 1983. However, the current construction schedule indicates that the embankment and its associated outlet works will be completed by November 1982. If this occurs, filling of Lake Sonoma could commence during next winter. This would result in the inundation of the ramp site. The ramp construction will require not only the pouring of the concrete ramps, but also extensive earthwork. Once this area is inundated and the soil saturated, the cost of performing this work will be much higher than if it is done in a timely fashion.

I would like to emphasize that we are not requesting all of the deleted recreational funds be restored or even all the funds for the marina complex. What we are asking for is the restoration of $1.1 million so that the ramp can be built before the site is under water.

The Warm Springs Dam-Lake Sonoma project is essential to an adequate water supply for the agriculture of Sonoma and Mendocino Counties and the domestic needs of one-third of a million people in three counties. We appreciate the support the project has received from this subcommittee over the years.

TEHAMA-COLUSA CANAL, CENTRAL VALLEY PROJECT, CALIFORNIA

STATEMENT OF TWYLA THOMPSON, MEMBER, BOARD OF SUPERVISORS, YOLO COUNTY, AND PRESIDENT, WESTSIDE CANAL ASSOCIATION

Mr. FRANKLIN. Mr. Chairman, our next witness is Twyla Thompson, who is a member of the board of supervisors of Yolo County and president of the Westside Canal Association.

Ms. THOMPSON. Thank you. I am Twyla Thompson. president of the Sacramento Valley Westside Canal Association and a supervisor of Yolo County. Furthermore, I own and farm land hear the terminus of the Tehama-Colusa Canal; so the completion of the canal and delivery of water is of foremost concern to us.

The association represents the Counties of Tehama, Glenn, Colusa, Yolo, Solano, Napa, and Lake, all of which are located on the west side of the Sacramento Valley. Incidentally, there are representatives here from almost every one of those counties, and I would ask the west side gang to stand for recognition.

Senator SCHMITT. My goodness, who is minding the store?

Ms. THOMPSON. We have lots of folks back there to do that. You can see the importance of all these projects for all of us.

These counties contain the service area of the authorized Tehama-Colusa Canal and its extension, the West Sacramento Canal, a part of the Federal Government's Central Valley project in California.

I might also add at this time, among the list of items that you see in the budget include loans to the districts of Glenn-Colusa, Yolo-Zamora and Glide Water District, which, of course, are all repayable, in the interest of substantial concerns that face some of the people before us.

Thanks to the support of this committee over the years, plans for the delivery of supplemental water to the Tehama-Colusa service area that were conceived over 30 years ago are being brought to fruition. The impacts of the project are clearly evident in the service area where new and refurbished grain silos can be seen, as well as the increase in the movement of agricultural products through the Port of Sacramento to overseas markets.

I would like, in expressing the appreciation to this committee for the support I mentioned earlier over the years, I would also like to state as a farmer in the area, in an area where farming is threatened, in a State growing as fast as California, if our main mission is to preserve prime agricultural land, the area of the Sacramento Valley that the association represents is the most fertile acreage, not only in the United States, but also the Nation and world. If we are to preserve prime agricultural land, then we must indeed provide for that land, and the best provision I know is the continued development of water projects.

Thank you very much, sir.

Senator SCHMITT. Thank you for your fine statement.

[The statement follows:]

STATEMENT OF TWYLA THOMPSON, PRESIDENT, SACRAMENTO VALLEY WESTSIDE CANAL ASSOCIATION, AND SUPERVISOR, YOLO COUNTY

My name is Twyla Thompson. I am President of the Sacramento Valley Westside Canal Association (Association) and a Supervisor of Yolo County. Furthermore, I own and farm land near the terminus of the Tehama-Colusa Canal; so the completion of the canal and delivery of water is of foremost concern to us.

The Association represents the counties of Tehama, Glenn, Colusa, Yolo, Solano, Napa, and Lake, all of which are located on the west side of the Sacramento Valley. These counties contain the service area of the authorized Tehama-Colusa Canal and its extension, the West Sacramento Canal, a part of the Federal Government's Central Valley Project in California.

Thanks to the support of this committee over the years, plans for the delivery of supplemental water to the Tehama-Colusa service area that were conceived over thirty years ago are being brought to fruition. The impacts of the project are clearly evident in the service area where new and refurbished grain silos can be seen as well as the increase in the movement of agricultural products through the Port of Sacramento to overseas markets.

The appropriations requested are essential to bring forward the physical facilities to provide water that will ensure the financial integrity of the system constructed thus far, as well as that of landowners whose financial decisions over the last 20 to 30 years have been predicated on completion of the respective facilities for the delivery of water. Important also is that with supplemental surface water supplies available we can, through the conjunctive use of the surface and groundwater, manage more effectively the total water resources. At the same time, our energy requirements for pumping will be reduced substantially -- the end result being similar to the implementation of numerous small hydroelectric projects which are being pursued aggressively today.

Also, the Association, respecting the needs of others within the total service area of the Federal-State water development system, supports those projects that are integral components of the overall water development system for the State.

In closing, it gives me great pleasure to say again, on behalf of the Association and all the people in both rural and urban areas alike, thank you for your efforts over the years and for your consideration of our request today. I would appreciate having this statement and supporting documents included in the record.

STATEMENT OF SACRAMENTO VALLEY WESTSIDE CANAL ASSOCIATION IN SUPPORT OF FY 81/82 APPROPRIATIONS

SUMMARY

The Sacramento Valley Westside Canal Association supports and respectfully requests FY81/82 appropriations for financing the following:

Item	Amount ($1,000's)
Tehama-Colusa Service Area	
1. Tehama-Colusa Canal and Facilities	11,091
2. Tehama-Colusa Canal Distribution System	7,950
3. Tehama-Colusa Fish Facilities, Red Bluff Recreation Area	50
4. Permanent Operating Facilities	1,004
5. Corning Canal Relift, Pumps, Safety Fencing, and Automation of the Tehama-Colusa Canal	1,463
6. Loans to Districts:	
--Glenn Colusa Irrigation District	5,132
--Yolo-Zamora Water District	200
--Colusa County Water District	846
--Glide Water District	390
Federal Central Valley Project/State Water Project	
7. Auburn Dam and Reservoir	2,841
8. Cottonwood Creek	3,000
9. Delta Support Studies	775

RESOLUTION NO. 81-191

(Resolution Supporting Adequate Federal Funding of the Tehama-Colusa Canal and Related Facilities Fiscal Year 1982)

RESOLVED: that the Board of Supervisors of the County of Yolo, State of California, hereby supports and urges the appropriation of funds in accordance with the President's budget for Fiscal Year 1982 to assure continued construction of the Tehama-Colusa Canal and related distribution facilities and of loan programs and planning funds necessary in connection therewith.

PASSED AND ADOPTED by the Board of Supervisors of the County of Yolo, State of California, this 10th day of March, 1981, by the following vote:

AYES: DeMars, Thompson, Marchand, Cameron, Black

NOES: None

ABSENT: None

s/ Robert N. Black
CHAIRMAN OF THE BOARD OF SUPERVISORS
COUNTY OF YOLO, STATE OF CALIFORNIA

ATTEST:

PETER McNAMEE, CLERK

By: ____________________
Deputy

(SEAL)

RESOLUTION NO. 24-1981

Supporting Adequate Federal Funding of the Tehama-Colusa Canal and Related Facilities Fiscal year 1982

RESOLVED: that the Board of Supervisors of the County of Tehama, State of California, hereby supports and urges the appropriation of funds in accordance with the President's budget for Fiscal Year 1982 to assure continued construction of the Tehama-Colusa Canal and related distribution facilities and of loan programs and planning funds necessary in connection therewith.

The foregoing Resolution was offered by Supervisor Johnson and adopted by the following vote of the Board:

AYES: Supervisors Johnson, Bundy, Flournoy and Frey

NOES: None

ABSENT OR NOT VOTING: Supervisor Crowley

STATE OF CALIFORNIA)
COUNTY OF TEHAMA) ss.

I, FLOYD A. HICKS, County Clerk and ex-officio Clerk of the Board of Supervisors of the County of Tehama, State of California, hereby certify the above and foregoing to be a full, true and correct copy of a Resolution adopted by said Board of Supervisors on the 10th day of March, 1981.

DATED: This 10th day of March, 1981.

FLOYD A. HICKS, County Clerk and
ex-officio Clerk of the Board of
Supervisors of the County of
Tehama, State of California

By Lu Hobart
Deputy

RESOLUTION NO. 81-57

RESOLUTION SUPPORTING ADEQUATE FEDERAL FUNDING OF THE TEHAMA-COLUSA CANAL AND RELATED FACILITIES FISCAL YEAR 1982

BE IT RESOLVED that the Board of Supervisors of the County of Solano, State of California, hereby supports and urges the appropriation of funds, in accordance with the President's Budget for Fiscal Year 1982, to assure continued construction of the Tehama-Colusa Canal and related distribution facilities, and of loan programs and planning funds necessary in connection therewith.

I, JOHN S. BLACKLOCK, Clerk of the Board of Supervisors of the County of Solano, State of California, do hereby certify that the above and foregoing Resolution was regularly introduced, passed and adopted by said Board at a regular meeting thereof held this 10th day of March, 1981.

On the motion of Supervisor HEWITT and the second of Supervisor BRAZELTON, this Resolution was adopted by the following vote:

AYES: SUPERVISORS: BRAZELTON, CUNNINGHAM, HEWITT AND CHAIRMAN BRANN

NOES: SUPERVISORS: NONE

ABSTAINED: SUPERVISORS: NONE

ABSENT: SUPERVISORS: DAVIS

WITNESS my hand and Seal of said Board this 10th day of March, 1981.

JOHN S. BLACKLOCK
Clerk of the Board of Supervisors

By Susan A. Kruse
Deputy Clerk

RESOLUTION NO. 81.05

OF THE BOARD OF DIRECTORS OF THE YOLO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT SUPPORTING ADEQUATE FEDERAL FUNDING OF THE TEHAMA-COLUSA CANAL AND RELATED FACILITIES FISCAL YEAR 1982

RESOLVED: that the Board of Directors of the Yolo County Flood Control and Water Conservation District, State of California, hereby supports and urges the appropriation of funds in accordance with the President's budget for Fiscal Year 1982 to assure continued construction of the Tehama-Colusa Canal and related distribution facilities and of loan programs and planning funds necessary in connection therewith.

PASSED AND ADOPTED by the Board of Directors of the Yolo County Flood Control and Water Conservation District, State of California, this 3rd day of March, 1981, by the following vote:

AYES: Directors Gordon, Griffin, Miller, Orrick

NOES: None

ABSENT: Director Barth

s/ O. O. Orrick
Chairman, Board of Directors
Yolo County Flood Control and
Water Conservation District

ATTEST:

s/ Wm. L. McAnlis
Wm. L. McAnlis, Secretary

BOARD OF SUPERVISORS, GLENN COUNTY, CALIFORNIA

RESOLUTION NO. 81 - 22

Resolution Supporting Adequate Federal Funding of the Tehama-Colusa Canal and Related Facilities Fiscal Year 1982

RESOLVED: that the Board of Supervisors of the County of Glenn, State of California, hereby supports and urges the appropriation of funds in accordance with the President's budget for Fiscal Year 1982 to assure continued construction of the Tehama-Colusa Canal and related distribution facilities and of loan programs and planning funds necessary in connection therewith.

PASSED AND ADOPTED by the Board of Supervisors of the County of Glenn, State of California, this 10th day of March, 1981, by the following vote:

AYES: Blacet, Hansen, Pride, Rumiano, and Edwards (Chairman)
NOES: None
ABSENT: None

CHAIRMAN, Board of Supervisors,
Glenn County, California

ATTEST:

COUNTY CLERK and Ex Officio Clerk
Board of Supervisors, Glenn County
California

STATEMENT OF RALPH NISSEN, PRESIDENT, GLENN-COLUSA IRRIGATION DISTRICT

Mr. FRANKLIN. Mr. Chairman, our next witness is Mr. Ralph Nissen, who is president of the Glenn-Colusa Irrigation District.

Mr. NISSEN. Mr. Chairman, I appreciate your situation timewise. We have submitted a written statement in addition to the one Mrs. Thompson presented which covers a portion of ours, and we ask your earnest consideration and help.

We are in a little different position than some of these. We have had appropriations. There is an irregularity in the way the appropriations appear. I won't take your time now; it is a rather extensive thing to explain it all. But I just want to alert the committee there is a situation there, and we appreciate your earnest consideration.

Senator SCHMITT. We will try to work it out. Strangely enough, we can sometimes.

Mr. NISSEN. This wasn't your fault.

Senator SCHMITT. I understand.

Mr. FRANKLIN. The money essentially was appropriated last year, authorized, set to go, and then it was used on another project. This is kind of causing a serious problem.

[The statement follows:]

STATEMENT OF RALPH A. NISSEN, PRESIDENT, GLENN-COLUSA IRRIGATION DISTRICT

The rehabilitation plan for the Glenn-Colusa Irrigation District was authorized by Congress in 1978 under the provisions of the Small Reclamation Projects Act (P.L. 984) (70 stat 1044, as amended). Funds were appropriated by your committee in the amount of nearly $14 million through FY 1980. However, there were delays in finalizing the repayment contract and in obtaining voter approval. Because of the delays, these funds were not used and now need to be reallocated.

The District's repayment contract was signed on September 11, 1980, and engineering designs were accelerated to maintain the master work schedule that was approved by WPRS last year. We understand that because of the delay, Congress reallocated the appropriated funds through last year's supplemental appropriations bill. Unfortunately, we were not aware of this action.

The amount of $585,000 currently in the President's budget is the amount that would have completed the appropriations for the total project ($17 million) in FY 1982. With the reallocation last year, however, this is inadequate. A reappropriation will allow completion of final designs as indicated on the master schedule, and the awarding of construction contracts scheduled for this summer. By this fall, the District will have made construction contract commitments approaching $14 million. Time is of the essence, and the schedule should be maintained or the project will be inadequately funded due to escalation.

The principal feature of the project is the replacement of the 70-year-old Sacramento River pump station. The oldest part of the pump station experienced a foundation failure in mid-September of last year. Fortunately, the failure occurred late in the irrigation season and past the critical demand period. The continued threat of failure and the need to improve pump efficiencies (less than 50 percent) suggest that the project should move to completion as rapidly as possible. The remainder of the canal improvements are to provide better water management control and to improve the overall water conveyance efficiencies for the total system.

We therefore request that the Committee support the reappropriation of the funds for FY 1982 to keep the project on schedule.

TEHAMA-COLUSA CANAL, CENTRAL VALLEY PROJECT, CALIFORNIA

STATEMENT OF FRANK ENOS, SECRETARY-MANAGER, ORLAND ARTOIS WATER DISTRICT

Mr. FRANKLIN. Mr. Chairman, our next witness is Mr. Frank Enos from the Tehama-Colusa Water Users Association.

Mr. ENOS. Mr. Chairman, my name is Frank Enos. I am secretary-manager for the Tehama-Colusa Water District. I have with me the president of the Orland Artois Water District, Mr. Donald Schonauer; and Mr. Fred Pryor, a supervisor from Glenn County.

Since completion of the Tehama-Colusa Canal through the area that serves the Orland Artois District, members in our district anxiously await the use of water for our crops and orchards, and repayment of the Federal investment in our irrigation project cannot be fully realized until this water is put on the lands for the repayment of the project.

Your continued approval of this type of investment further enhances not only the repayment of the projects, but the continued massive economic spinoff as a result of irrigation. We urge your committee's continued support in this investment in the 1982 appropriations in the amount of $7.9 million in completing canal construction of the Tehama-Colusa Canal. Thank you very much.

Senator SCHMITT. Thank you.

[The statement follows:]

STATEMENT OF FRANK ENOS, JR., SECRETARY-MANAGER, ORLAND-ARTOIS WATER DISTRICT, AND PRESIDENT, TEHAMA-COLUSA WATER USERS ASSOCIATION

My name is Frank Enos, Jr. I am Secretary-Manager of the Orland-Artois Water District and President of the Tehama-Colusa Water Users' Association.

Since completion of construction on the Tehama-Colusa Canal the landowners on the service area anxiously await the use of this supplementary source of water for our crops and orchards. Repayment of the federal investment in our irrigation project can only be realized through the construction of distribution systems. Your continued approval for this type of expenditure further enhances not only the repayment of the project but increases the massive economic spinoff as a result of irrigation as well as providing additional food for use or trade by our country.

We urge your committee to approve the fiscal year 1981-82 expenditure in the amount of $7,950,000 for continued distribution system construction in the Tehama-Colusa service area.

RE TEHAMA-COLUSA CANAL PROBLEMS
TEHAMA-COLUSA CANAL WATER USERS' ASSOCIATION

Water Supply

A. The former Secretary of Interior Andrus, has declared no more water available for the Sacramento Valley Canals (Tehama-Colusa and Corning Canals) service area because of increased needs in the Delta. Following are some of the problems resulting.

1. Sacramento Valley areas thus are being denied water while exports through CVP and SWP continue. This is contrary to State policies enunciated in the "Counties of Origin" and "Watershed Preservation" acts. The Secretary thus agrees with the State on Delta policies but denies State policies with respect to priority and protection for areas where water originates. Since inception of the CVP in the middle 1930s the Interior Department and its Bureau of Reclamation have consistently assured the people of California that only surplus water would be exported through the CVP.

2. Denial of water for Sacramento Valley Canals service area is being done retroactively. The canal was authorized in 1953 and it is with the original authorization of the Sacramento Valley Canals that allocates a block of water for future contracting within the service area. After many stops and starts on construction of the canal it was finally completed in 1980. With the factors influencing progress

on the Canals beyond their control the Districts have been unable to plan and proceed with the necessary distribution systems. Consequently the Districts have been unable to contract for the amounts of water they now need. Over the years, until the former Secretary announced his policy of no water, the Districts were assured that water was reserved for them in the original authorization and as soon as the full needs were established water contracts would be signed for the full amounts, this, now is being denied by the Secretary, while he allows continued export from the Delta, agrees to greatly increased CVP responsibility for Delta flows and talks of a first priority of 250,000 acre-feet for a supplemental water service contract for lands annexed to the Westlands Water District.

3. The foregoing policies of the former Secretary leave the Districts unable to obtain water and construct the necessary distribution systems. Consequently, landowners who have spent large sums developing their lands for irrigation are now left with no water supply. Most of them leveled land and installed groundwater wells to provide interim water pending availability of the Canal supply. Groundwater supplies are not adequate for more than a few years so now landowners are faced with loss of investments in the order of several thousand dollars per acre.

4. Continued delays in obtaining water and building distribution systems are pushing the Districts into difficult financial situations. Construction costs are inflating more rapidly than the farmers' incomes from their crops.

5. The Government now has some 165 million dollars invested in the Sacramento Valley Canals. The two Canals have capacities to deliver 625,000 acre-feet annually. Present contracts total 282,800 acre-feet. With Canal lossess estimated at about 50,000 acre-feet this leaves some 292,200 acre-feet yet to be contracted and sold. Generally this means that with only 282,800 acre-feet contracted for, of a total of 575,000, some $70,000,000 of the federal investment in the Canals cannot be returned to the government.

We urge the Secretary of Interior to reconsider the action of placing a moratorium on further contracting and allow Districts' in the "areas of origin" to contract for additional needed supply. We urge the Secretary of Interior make good that only "surplus" water from the Sacramento Valley Basin are offered for export south of the Delta. We urge the Secretary of Interior to consider the fact that the Sacramento Valley Canals system is currently being operated contrary to the original authorization as set forth by the Congress of the United States. These issues are of grave concern to the members of the Tehama-Colusa Water Users' Association and we wish your review and administrations future guidance in these matters.

TEHAMA COUNTY - TEHAMA-COLUSA CANAL SERVICE AREA

		Acres			
	Max. A.F.	Gross Area	Irrigable	A.F./AC.	Water Requirement
EXECUTED CONTRACTS					
Tehama Water District	400	134	134	2.99	
Kirkwood Water District	2,100	975	855	2.46	
DISTRICTS WITH DEFICIENT SUPPLY OR WITHOUT CONTRACTS					
Richfield Water District		580	530	2.36	1,250
Tehama County lands outside of districts within T. C. Canal Service Area		17,500	15,750	2.5(1)	39,375
TOTAL FUTURE WATER CONTRACT NEEDS FOR THAT PORTION OF TEHAMA COUNTY WITHIN T.C. CANAL SERVICE AREA					40,625
TOTAL FUTURE WATER CONTRACT NEEDS FOR THAT PORTION OF TEHAMA COUNTY WITHIN THE CORNING CANAL SERVICE AREA					80,600
TOTAL FUTURE WATER CONTRACT NEEDS FOR TEHAMA COUNTY					121,225

(1) Average demand assumed for Tehama County lands 2.5 A.F./Acre

TEHAMA COUNTY - CORNING CANAL SERVICE AREA

		Acres			
	Max. A.F.	Gross Area	Irrigable	A.F./AC.	Water Requirement
EXECUTED CONTRACTS					
Proberta Water District	5,500	3,005	2,4[illegible]6	2.2	
Thomes Creek Water District	8,400	2,417	2,307	3.6	
Corning Water District	25,300	13,148	10,887	2.32	
Elder Creek Water District	4,600	3,745	3,273	1.41	
DISTRICTS WITH DEFICIENT SUPPLY OR WITHOUT CONTRACTS					
Rawson Water District		3,575	1,940	2.5 (1)	4,850
El Camino Water District		7,631	5,800	2.5 (1)	14,500
Tehama County lands outside of districts within Corning Canal Service Area		27,200	24,500	2.5 (1)	61,250
TOTAL FUTURE WATER CONTRACT NEEDS FOR that portion of TEHAMA COUNTY within the CORNING CANAL SERVICE AREA					80,600 A.F.

(1) Average demand assumed for Tehama County lands 2.5 A.F./Acre

GLENN COUNTY - TEHAMA-COLUSA CANAL SERVICE AREA

EXECUTED CONTRACTS

		Acres		
	Max. A.F.	Gross Area	Irrigable	A.F./AC.
Kanawha Water District	45,000	15,143	13,737	3.23
Orland-Artois Water District	53,000	30,031	27,459	1.93
Glide Water District	10,500	9,377	6,752	1.56

DISTRICTS WITH DEFICIENT SUPPLY OR WITHOUT CONTRACTS

				Water Requirement
Orland-Artois Water District	30,031	27,459	1.32 (1)	36,250
Glide Water District	9,377	6,752	1.69 (1)	11,410
Capay Rancho Water District (3)	10,029	9,400	3.25 (1)	30,550
Glenn County lands outside of districts within T.C. Canal Service Area	61,100	54,990 (2)	3.25	178,720
TOTAL FUTURE WATER CONTRACT NEEDS FOR GLENN COUNTY				256,930 A.

(1) Average demand assumed for Glenn County lands 3.25 A.F./Acre.
(2) Assumed 10% of gross area non-irrigable.
(3) A portion of Capay Ranch Water District lies within Tehama County.

SUMMARY OF WATER REQUIREMENTS

FOR TEHAMA-COLUSA AND CORNING CANALS
SERVICE AREAS

	Tehama-Colusa Canal	Corning Canal
Executed Contracts	282,800	43,800
Estimated Future Water Contract Needs	488,600	80,600
TOTAL SERVICE AREA - REQUIREMENT	771,400 acre ft./year	124,400 acre ft./ye
Approximate Canal Capacity	500,000	125,000
TOTAL FUTURE WATER - DEFICIENCY	221,400 acre ft./year	

STATEMENT OF GEORGE BARBER, BOARD OF SUPERVISORS, SAN JOAQUIN COUNTY

Mr. FRANKLIN. Mr. Chairman, our next witness is Mr. George Barber, who is a member of the board of supervisors from San Joaquin County.

Mr. BARBER. Mr. Chairman, I am here as a farmer, perhaps. I might add a fifth generation California farmer, on the same ranch. That is probably somewhat unique in the history around there. There are not very many of them left that have been there that long, in the same business I might add.

I am accompanied by Supervisor Evelyn Costa, who is also a farmer; as well as Charles Dixon, county administrator; and Mr. Gerald Sherwin, county counsel.

My detailed statement is on file with the staff of your committee, and I would request it be incorporated in the record.

We have just two or three projects that I would highlight.

Our board is very interested in the construction by the Corps of Engineers of Stockton ship channel and the New Melones Dam, and construction by the Water and Power Resources Service of the Auburn Dam and Folsom South Canal unit. The board of supervisors respectfully requests the Congress to continue to appropriate the necessary funding for their completion.

Thank you.

[The statement follows:]

STATEMENT OF GEORGE L. BARBER, MEMBER, SAN JOAQUIN COUNTY (CALIF.) BOARD OF SUPERVISORS

My name is George L. Barber. I am a member of the Board of Supervisors of the County of San Joaquin, California. A resolution of the Board authorizing this presentation is attached.

In summary, the County of San Joaquin requests that the following appropriations be made to the Corps of Engineers and the Water and Power Resources Service for the fiscal year between October 1, 1981, and September 30, 1982, for projects of concern to the County:

Corps of Engineers - Construction	
New Melones Project	$12,700,000
Stockton Ship Channel	1,400,000
Corps of Engineers - Surveys	
Sacramento-San Joaquin Delta	$ 190,000
San Joaquin River Basin	1,240,000
Water and Power Resources Service - Construction	
Auburn Dam	$ 2,841,000
Folsom South Canal	$ 400,000
Water and Power Resources Service - Investigations	
Delta Support Studies	$ 1,312,000
Corn Requirement Study	50,000
New Melones Studies	200,000

DETAILED COMMENTS

Corps of Engineers - Construction

New Melones Project..........................$12,700,000

The New Melones Dam, Reservoir and Powerplant are complete for operational purposes. In calendar year 1980, the Project provided some flood control, power and fishery benefits, although restrictions on its operation have reduced these benefits substantially. Properly operated, the Project can prevent heavy damage this year through control of potentially heavy snow-melt run-off and can begin its authorized power functions so as to reduce dependence on foreign oil imports and to augment area generating reserves.

There is need to prepare for reservoir and downstream recreation and public access development and to move forward on reservoir clearing. The requested appropriation will permit these essential features to progress.

Stockton Ship Channel........................$ 1,400,000

The entire San Francisco Bay-Stockton Channel Project has been long delayed. As a result, an increasing percentage of deep-draft ocean vessels are unable to reach the Port of Stockton or must load lightly which increases shipping costs greatly and reduces efficiency.

The Board of Supervisors urges that work on the entire channel proceed as rapidly as possible and, especially that a full start be made on the actual channel deepening in fiscal year 1981-82.

Corps of Engineers - Surveys

Sacramento-San Joaquin Delta..................$ 190,000

These funds are needed so the Corps can complete its survey report being prepared to ascertain the extent of Federal-State-local participation in Delta levee rehabilitation and repair. In 1980, five Delta islands were inundated and disastrous losses in crops resulted. There is complete agreement that a systematic cooperative program of rehabilitation and repair is needed to preserve the massive agricultural production of the Delta and to protect Delta water quality so important to both the State Water Project and the Federal Central Valley Project.

Completion of the Corps' survey report is the essential first step in developing such a program.

San Joaquin River Basin......................$ 1,240,000

San Joaquin County is particularly interested in the portion of this survey which deal with the Littlejohn Stream Group and New Hogan Dam. Littlejohn Creek and related streams are repeated sources of flood damage in the southeastern County, and our Board looks forward keenly to the development of plans for improving conditions in this area.

Water and Power Resources Service - Construction

Auburn Dam...................................$ 2,841,000

A primary decision regarding the type of seismically-safe dam to be constructed was agreed upon in the Interior Department late last year. September, 1980, reports by the Water and Power Resources Service, indicate the authorized project is economically justified. Refinements in those economic studies, if the Secretary thinks they are needed, and final design and preparation of specifications for this much-needed project should be pressed forward during the current and 1981-82 fiscal years looking towards resumed construction as soon as possible.

Folsom South Canal...........................$ 400,000

The most important of the Auburn-related programs is Folsom South Canal. This Canal now ends in Sacramento County about 10 miles north of the San Joaquin County line. The completed portion was designed to deliver over 400,000 acre-feet of water to eastern San Joaquin County. This area is almost wholly developed to pasture, vineyard, row, and orchard crops and is suffering critical groundwater overdrafts.

With Auburn Dam being economically justified as indicated in the Service report, parallel progress should be made on the Canal. Negotiations looking towards allocation of water to parts of the service area can resume, the Environmental Impact Statement can be completed, and a start can be made on right-of-way surveys and other preliminaries to extension of the Canal to its originally-intended terminus at Lone Tree Creek in San Joaquin County.

The requested funds should be available so progress on the Canal can be resumed.

Water and Power Resources Service - Investigations

Delta Support Studies..........................$ 1,312,000

A wide variety of analyses and studies are required in the Sacramento-San Joaquin Delta in connection with existing and potential problems. Many of these programs involve cooperation with the State of California since both the State Water Project and the Federal Central Valley Project use the Delta as a means of conveying water across the Delta to their export pumping plants.

The State expends funds in studying the effects of cross-Delta flows on water quality in the Delta and on export waters and in studying the effects of Project operations on fishery resources. The Service should have comparable funds with which to discharge its responsibilities toward the Delta.

Delta Corn Requirement Study..................$ 50,000

The State has been funding this program for the past two years without participation by the Water and Power Resources Service. The question posed concerns the quality of water required to all production stages for corn, a major crop grown in the Sacramento-San Joaquin Delta. Since such matters are important to the Water and Power Resources Service as operator of the Central Valley Project, it is believed the Service should bear part of the study endeavor.

New Melones Studies...........................$ 200,000

Water currently is being stored in New Melones Reservoir in accordance with a recent Court decision. It is essential that the Water and Power Resources Service be in position to enter into contracts for water service when adequate supplies have been stored. There are critical needs for supplemental water in the immediate Stanislaus River area to overcome groundwater overdrafts and to improve water quality. These needs and adequate storage to meet them can coincide by the time the essential studies of diversion and conveyance locations, contracting conditions and payment capabilities are completed in the 1981-82 or following fiscal year. Such contracts will aid materially in securing repayment of the reimbursable Federal investment and their negotiation should be expedited.

STATEMENT OF TOM MADDEN, COUNCILMAN, STOCKTON, CALIF.

I am Councilman Tom Madden of the City of Stockton, California authorized by the Stockton City Council to make this statement before your honorable body today.

The City of Stockton supports the Corps of Engineers and Water and Power Resources Service surveys, flood control and reclamation projects in the following amounts:

1.	New Melones Lake	$12,700,000
2.	Deepening of the Stockton Ship Channel to 35 feet and realigning part of the Channel	$ 1,400,000
3.	Survey for the San Francisco Bay and Sacramento-San Joaquin Delta Water Quality and Waste Disposal	$ 255,000
4.	Sacramento-San Joaquin Delta Survey	$ 190,000
5.	San Joaquin River Basin Survey	$ 1,240,000
6.	The Auburn Dam and Reservoir	$ 2,841,000
7.	Folsom South Canal	$ 400,000
8.	Delta Support Studies	$ 775,000
9.	Delta Corn Replacement Study	$ 50,000

FLOOD CONTROL -- CORPS OF ENGINEERS

NEW MELONES LAKE------------------------------------$12,700,000

The President's budget contains $12,700,000 which is the amount we support. This money is for cultural preservation in the reservoir and acquisition of riparian habitat downstream of the dam. As these features will complement the project, this capability is supported. New Melones is a project which augments the supply of water within Central California and we urge that the project be utilized to its maximum potential, both for its flood control benefits and for the additional water supply which it will create.

STATEMENT OF ARNOLD RUE, COUNCILPERSON, CITY OF STOCKTON

PREPARED STATEMENT

Mr. FRANKLIN. Mr. Chairman, our next speaker is Mr. Arnold Rue, councilperson for the city of Stockton.

Mr. RUE. Mr. Chairman, I am Arnold Rue. With me is Tom Madden and our city manager, Ray Seedlar.

We have already filed our statement and we would request and appreciate your support of the various projects that are included therein. Thank you very much.

Senator SCHMITT. Thank you, sir.

[The statement follows:]

BEFORE THE BOARD OF SUPERVISORS OF THE SAN JOAQUIN COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, STATE OF CALIFORNIA

R-81-492

RESOLUTION APPROVING STATEMENTS TO BE SUBMITTED TO SUBCOMMITTEES ON ENERGY AND WATER DEVELOPMENT OF HOUSE OF REPRESENTATIVES AND SENATE APPROPRIATIONS COMMITTEES

- - - - - - - - - - - - -

WHEREAS, the Subcommittee on Energy and Water Development of the Committee on Appropriations of the United States House of Representatives and the Subcommittee on Energy and Water Development of the Committee on Appropriations of the United States Senate will each separately hold hearings on March 26, 1981, on the budgets of the U. S. Army Corps of Engineers and the Water and Power Resources Service; and

WHEREAS, numerous projects contained in those budgets are of benefit to San Joaquin County;

NOW, THEREFORE, BE IT RESOLVED that Supervisor George Barber and Supervisor Evelyn Costa are hereby authorized and directed to appear before the aforementioned congressional subcommittees in Washington, D. C. in support of the appropriations for pending flood control, navigation, and water supply projects which will be of benefit to San Joaquin County and to present the attached statements.

PASSED AND ADOPTED this 17th day of March, 1981, by the following vote of the Board of Supervisors, to wit:

AYES: Supervisors Yoshikawa, Barber, Alva, Costa, Wilhoit

NOES: None

ABSENT: None

DOUGLASS W. WILHOIT, Chairman
Board of Supervisors
San Joaquin County Flood Control
and Water Conservation District
State of California

ATTEST: JORETTA J. HAYDE
Clerk of the Board of Supervisors
of the San Joaquin County Flood
Control and Water Conservation
District, State of California

By Cindy DuBrutz

ENDORSED
FILED March 17, 1981
JORETTA J. HAYDE, Clerk

By Cindy DuBrutz
Deputy

SAN FRANCISCO BAY TO STOCKTON SHIP CHANNEL DEEPENING--$ 1,400,000

The City supports the President's budget and the California Water Commission's recommendation of $1,400,000 for the San Francisco Bay to Stockton Ship Channel Deepening. The present Channel depth of 30 feet combined with the increasing size and draft of oceangoing vessels prevents maximum usage of this vital port facility which is not only used by merchant vessels but also by the U. S. Navy. Now vessels cannot carry full loads when sailing on the Channel, but they will be able to when the Channel is deepened to 35 feet. That improvement will make Port usage more cost effective for the shippers.

The Port of Stockton is one of the large employers in San Joaquin County affecting directly or indirectly approximately 4,000 to 5,000 jobs with a payroll of $50 million. Unless proposed improvements to the Stockton Ship Channel are made, the Port of Stockton will fall behind in being a leading employer thus increasing the persistent unemployment for Stockton. The Corps of Engineers has studied the environmental impacts of this project and determined there are "no adverse effects". Therefore, construction should progress as soon as possible.

SURVEYS -- CORPS OF ENGINEERS

The City of Stockton urges appropriations for the following surveys, all of which affect the Stockton area:

SAN FRANCISCO BAY AND SACRAMENTO-SAN JOAQUIN DELTA WATER QUALITY AND WASTE DISPOSAL	$ 255,000
SACRAMENTO-SAN JOAQUIN DELTA	$ 190,000
SAN JOAQUIN RIVER BASIN	$1,240,000

WATER AND POWER RESOURCES SERVICE

AUBURN DAM AND RESERVOIR----------------------------$2,841,000

The City Council supports the President's budget amount and the California Water Commission's recommendation of $2,841,000 for the Auburn Dam and Reservoir. The Council also urges Congress to do the following:

1. To maintain support of a reauthorized Auburn Dam.
2. To recommend the earliest possible completion of any economic and environmental studies needed to support such reauthorization in the current session of the Congress.
3. To recommend appropriation of sufficient funds for fiscal year 1981-82 to complete studies on and final designs of Auburn Dam and to participate in Division of Dam Safety review thereof.

FOLSOM SOUTH CANAL------- ---------------------$ 400,000

The Council supports the state Water Commission's recommendation of $400,000 for Folsom South Canal. These funds are needed to complete the Canal EIS, to participate in Memorandum of Understanding negotiations, to process pending litigation to a conclusion, to carry on studies required for contract negotiation with local Districts and to take initial steps toward land acquisition and negotiation of water contracts. The City of Stockton is in a critically overdrafted groundwater basin. The water agencies in the basin are taking steps now to develop alternative groundwater management plans looking toward correcting the overdraft when supplemental water is available. The American River water, under the Memorandum of Understanding allocations between the Canal and the Lower River, offers a practical and energy-efficient source of water and should be developed to provide supplemental water to this area at the earliest possible time.

EXECUTED CONTRACTS

	Max. A.F.	Acres Gross Area	Irrigable	A.F./AC.	Water Requirement
Westside Water District	65,000	12,105	10,600	6.13	
LaGrande Water District	7,200	1,454	1,434	5.01	
Davis Water District	4,000	961	940	4.26	
County of Colusa	8,670	47,980	43,180	0.20	
Colusa County Water District (3)	62,200	40,680	36,120	1.72	
4-M Water District	5,700	2,313	1,767	3.22	
DISTRICTS WITH DEFICIENT SUPPLY OR WITHOUT CONTRACTS					
Holthouse Water District		1,860	1,670 (5)	3.25	5,430
Glenn Valley Water District		1,998	550	3.14	1,730
Cortina Water District		1,294	1,140	3.25 (1)	3,705
Colusa County Water District		40,680	36,120	0.78 (2)	28,170
Colusa County lands outside of districts within T.C. Canal Service Area		47,890	43,180 (4)	3.05 (1)	131,700
TOTAL FUTURE WATER CONTRACT NEEDS FOR COLUSA COUNTY					170,735 A.F.

(1) Average demand assumed for Colusa County lands 3.25 A.F./Acre
(2) Total demand for Colusa County Water District assumed to be 2.5 A.F./Acre
(3) Approximately 1,200 acres of Colusa County Water District lies within Yolo County
(4) Assumed 10% of gross non-irrigable
(5) Approximately 1,000 acres of the Holthouse Water District lies outside of the current Tehama-Colusa Canal Service Area

NOTE: This proposed Freshwater Water District which lies outside of the current Tehama-Colusa Canal Service Area will require approximately 1,000 acre feet.

YOLO COUNTY - TEHAMA-COLUSA CANAL SERVICE AREA

EXECUTED CONTRACTS

		Acres			
	Max. A.F.	Gross Area	Irrigable	A.F./AC.	Water Requirement
Dunnigan Water District	19,000	10,657	9,650	1.97	
Future Water Contract needs for Yolo County lands outside of districts within T.C. Canal Service Area		11,260	10,140	2.0 (1)	20,280 A.F.

(1) Average demand assumed for Yolo County lands 2.0 A.F./Acre

NOTE: Yolo-Zamora Water District which lies outside of the current Tehama-Colusa Canal Service Area has requested 40,000 A.F. of water from the Tehama-Colusa Canal.

DELTA SUPPORT STUDIES--------------------------------$775,000

The City Council supports the Water Commission's recommendation for this level of studies by the Water and Power Resources Service for Delta studies.

DELTA CORN REPLACEMENT STUDY-------------------------$ 50,000

Since this study may benefit agricultural production proximate to Stockton, which has an agribusiness economy, the California Water Commission's recommendation is supported.

Resolution No. 38,088

STOCKTON CITY COUNCIL

WHEREAS, on March 26, 1981, appropriate committees of the Congress of the United States will conduct hearings to consider Federal appropriations for flood control, reclamation, and navigational projects and surveys for fiscal year 1981-82, and

WHEREAS, several projects and surveys to be considered at said Congressional hearings will be of benefit to the City of Stockton and its environs, and

WHEREAS, the expeditious construction of said projects and completion of said surveys is required to protect the health, welfare and safety of the residents of this area; now therefore,

BE IT RESOLVED BY THE COUNCIL OF THE CITY OF STOCKTON, AS FOLLOWS:

That the City of Stockton does hereby support the appropriations by the Congress of the United States of funds for fiscal year 1981-82 for the planning, continuation and completion of flood control, reclamation, and navigational projects and surveys; namely, NEW MELONES LAKE, SAN FRANCISCO BAY TO STOCKTON SHIP CHANNEL DEEPENING, SAN FRANCISCO BAY AND SACRAMENTO-SAN JOAQUIN DELTA WATER QUALITY AND WATER DISPOSAL SURVEY, SACRAMENTO-SAN JOAQUIN DELTA SURVEY, SAN JOAQUIN RIVER BASIN SURVEY, THE AUBURN DAM-FOLSOM SOUTH CANAL, DELTA SUPPORT STUDIES, AND DELTA CORN REPLACEMENT STUDY, which affect the City of Stockton and its environs; be it

FURTHER RESOLVED, that the representatives of the City of Stockton be and hereby are authorized to appear before appropriate committees of the Congress of the United States on March 26, 1981, for the purpose of making presentations consistent with this resolution; be it

FURTHER RESOLVED, that the City Clerk of the City of Stockton is hereby authorized and directed to send copies of this resolution to the Honorable Alan Cranston, the Honorable S. I. Hayakawa and the Honorable Norman Shumway.

PASSED, APPROVED and ADOPTED this 16th day of March, 1981.

s/ DANIEL A. O'BRIEN

DANIEL A. O'BRIEN, Mayor
of the City of Stockton

ATTEST:

s/ JOHN M. JARRETT

JOHN M. JARRETT, City Clerk
of the City of Stockton

I, John M. Jarrett certify that this document is a true and correct copy of Resolution No. 38,088 adopted by the City Council of the City of Stockton on March 16 19 81 and on file in the office of the City Clerk of the City of Stockton.

Date: March 17 1981

JOHN M. JARRETT
City Clerk of the City of Stockton

By
DEPUTY

STATEMENT OF THE STOCKTON-EAST WATER DISTRICT, CALIFORNIA

The Stockton-East Water District is located in Eastern San Joaquin County, California, and extends from the Sierra Nevada on the east, to the edge of the Sacramento-San Joaquin Delta on the west.

The District encompasses 114,500 acres, of which about 75,000 acres is irrigated farmland. The total population of the District is nearly 200,000 or approximately 58 percent of the population of San Joaquin County, including the City of Stockton. The population of the District is expected to reach 320,000 by the year 2020.

The District provides surface water both for agricultural and municipal uses. In addition to the supply of water for agriculture, the District operates a water treatment plant, which was commissioned in March, 1977, for the wholesale supply of treated water to the City of Stockton, the County of San Joaquin, and the California Water Service Company; which together, including their own sources of groundwater, supply the City of Stockton and surrounding areas. The purpose of the treatment plant is to reduce the overdraft on the groundwater by supplying good quality treated surface water to areas previously served by the groundwater basin. This plant is being paid for by local revenue bonds.

Presently, the District's source of surface water is from New Hogan Dam on the Calaveras River which source is now fully developed. Under contractual arrangements between Stockton-East Water District, Calaveras County Water District, and the Water and Power Resources Service, almost the entire yield of New Hogan Dam is presently utilized by Stockton-East Water District. However, 43.5% of that yield is reserved for Calaveras County Water District when use can be made of the water by that District.

The District's present water needs are being partially satisfied by overdrafting the groundwater supply by an average of about 59,000 acre-feet annually[1/] above the safe groundwater yield. The State of California Department of Water Resources has designated eastern San Joaquin County as an area of critical overdraft.

[1/] Bookman-Edmonston Engineering, Inc., Water Action Program, (September, 1978).

Stockton-East Water District, in its Water Action Program[1/], has determined the need for supplemental surface water for the year 2020 to be 126,000 acre-feet annually; this is expected to increase to 145,000 acre-feet annually by the year 2030.

In short, the Stockton-East Water District's source of surface supply will eventually be reduced by about 43% while the District's present surface supply is insufficient to curtail the continuing overdraft of groundwater, let alone recharge and restore the groundwater level.

Two Federal Flood Control and Reclamation Programs are of primary concern to the District; namely, New Melones Reservoir and the Auburn Dam and Folsom South Canal. The Stockton-East Water District supports the appropriations in the Presidents' Fiscal Year 1981-82 Budget Request for these two projects.

The District further encourages early approval of the Water and Power Resources Service's recommendations contained in the Stanislaus River Basin Alternatives and Water Allocation Special Report, dated September, 1980, which provides for an interim water supply to the Stockton-East Water District, firm and interim supplies to Central San Joaquin Water Conservation District, and the potential for a County-wide solution to our supplemental water needs for many years to come. It is imperative that New Melones be filled to accomplish these objectives; and to realize its full multipurpose potential for hydroelectric power, irrigation and domestic benefits, and alleviation of groundwater overdrafts.

The District also urges that sufficient funds be appropriated, within the guidelines of the new administration, to resolve the current dilemma preventing construction of the Auburn Dam and Folsom South Canal so that a permanent solution to Eastern San Joaquin County's water needs can be implemented in a timely manner.

NEW MELONES DAM, CALIF.

STATEMENT OF MARSHALL JONES, CONSULTING ENGINEER, STANISLAUS COUNTY

Mr. FRANKLIN. Mr. Chairman, our next speaker is Mr. Marshall Jones, a consulting engineer for Stanislaus County.

Mr. JONES. Mr. Chairman, I am Marshall Jones, consulting engineer for Stanislaus County Board of Supervisors.

As Congressman Shumway explained, the New Melones project in Stanislaus County in the Central Valley of California is now completed and ready to store water. I would further explain the Bureau of Reclamation needs some $200,000 to start the determination of water requirements in the service area of the project and the cost facilities that will be required to serve these lands. Many of these lands are very seriously overdrafted in their groundwater at this time and need some supplemental water very badly. The board of supervisors certainly appreciates the consideration of the committee in funding this work for the Bureau of Reclamation. Thank you.

Senator SCHMITT. Thank you, sir.

[The statement follows:]

STATEMENT OF MARSHALL JONES, WATER CONSULTANT, STANISLAUS COUNTY, CALIF.

New Melones Dam Project on the Stanislaus River in California is complete and storage of water has commenced. The Federal Court has authorized the Water and Power Resources Service to fill the reservoir for power purposes, for fishery enhancement and water quality control. Our California State Water Resources Control Bord has directed that no use of the Reservoir for conservation of water for agriculture be made until contracts for such water are signed between the farmers' organizations and the WPRS. It will be necessary for the WPRS to conduct studies of water requirements and diversion and conveyance works to provide bases for negotiation of water service and repayment contracts. Considering the urgent need for additional water in the service area of the New Melones Project it is essential that the studies proceed without delay. Further, repayment of the Federal investment in the irrigation portion of the project is dependent upon the sale of water. The Stanislaus County Board of Supervisors accordingly respectfully urges your Committee to approve the sum of $200,000 for the WPRS in Fiscal Year 1982 to commence the needed studies.

Studies show that in eastern Stanislaus and Merced Counties there are some 140,000 acres of agricultural land with a need for supplemental water of 325,000 acre-feet. Groundwater supplies are inadequate to serve the area and in places are being overdrafted now. These are upland lands that could be served with New Melones Project water by gravity flow. The only remaining possible alternate source of water for these lands would be Sacramento River water which would have to be pumped from the Sacramento-San Joaquin Delta at enormous cost. Actually the cost would be far beyond the bounds of economic feasibility and thus the Sacramento River is not a real source of water. The New Melones Project is the last "water hole" for these lands.

Additionally, there is widespread overdrafting of groundwater in certain highly developed areas of Eastern San Joaquin County. Immediate use of New Melones Project water could be made in these areas. The New Melones water yield will not be adequate to meet all needs but a combination of interim and permanent contracts for water would benefit the areas greatly.

The Water and Power Resources Service has authority under a court decision to operate the New Melones Reservoir for power, fishery enhancement and water quality control. Under a ruling by the California State Water Resources Control Board the WPRS cannot operate the reservoir for purposes of providing agricultural water until water service and repayment contracts are signed with appropriate local agencies. As a basis for such contracts the WPRS must make studies of water requirements, diversion works and conveyance facilities necessary to deliver water from the Project to the landowners. It is important that these studies, which are estimated to require three years, be started soon. Following the signing of such contracts it may require several years, depending on weather and precipitation, to accumulate in the reservoir sufficient water to supply the farmers' needs.

For the foregoing reasons we respectfully ask that you approve the $200,000 proposed for WPRS for FY 1981 to initiate these urgently needed studies. The needs for water are urgent and the sales of water will go toward repayment of the Federal investment in the project.

We appreciate the efforts of your committee which have brought the New Melones Project to this stage and look forward to the time when the benefits of the water will be available to our farmers.

SAN LUIS REY RIVER FLOOD CONTROL STUDY

PREPARED STATEMENT

Mr. FRANKLIN. Larry Bagley, mayor of Oceanside, asked that his statement be included in the record.

Senator SCHMITT. Yes, it will be included.

[The statement follows:]

STATEMENT OF LAWRENCE M. BAGLEY, MAYOR, OCEANSIDE, CALIF.

I am Lawrence M. Bagley, Mayor of the City of Oceanside, California. I am most appreciative of the opportunity to be heard today and to testify on the urgency for the Congress to provide in this coming year's fiscal budget, the Planning allocation of $300,000 requested by the Army Corps of Engineers and the California Water Commission to fund Phase I engineering and design for this project.

We are most appreciative that Congress in 1965 had the foresight to initiate plans for averting major flood disasters through passage of the Flood Control Act. The U.S. Army Corps of Engineers in 1968 completed a comprehensive study of the lower San Luis Rey River Floodplain which included a preliminary flood control project plan to protect a major area of Oceanside from extensive damage. Planning has been exceedingly slow due to the lack of funding.

The winter storms of January, February, and March of 1980, which caused great hardship and destruction, highlighted the need to control these floodwaters. The citizens of Oceanside experienced extensive flooding of homes and factories—loss of property and loss of wages. Portions of the road system were destroyed causing some homes to be completely cut off from effective Police and Fire protection. If the magnitude of the storms had been any greater, the results would have been catastrophic. The urgency of prompt completion of this project is clear.

Recent allocations of Congress have assisted the Corps of Engineers toward this goal. Now the community of Oceanside requests your continuing cooperation by providing these urgently needed funds for an "on schedule" completion of the San Luis Rey Flood Control Project.

LOS ANGELES COUNTY DRAINAGE AREA STUDY

STATEMENT OF HOWARD HAILE, CHIEF ENGINEER, LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

Mr. FRANKLIN. Our next speaker, Mr. Chairman, is Mr. Howard Haile, who is chief engineer of the Los Angeles Flood Control District.

Mr. HAILE. Very briefly, we are only asking for those things which we believe reflect on the operation of an existing flood control system which is rather extensively affecting the general area of Los Angeles. We are asking that the President's budget allocation to the U.S. Army Corps of Engineers for Los Angeles County in the amount of $500,000 be supported; also, that the committee support allocation of funds adequate to maintain the features that are responsible for maintaining the Los Angeles drainage system; and particularly we would like to echo and endorse the comments made by Congresswoman Fiedler about Hansen Dam. Thank you.

Senator SCHMITT. Was that siltation a result of a fire and then flood?

Mr. HAILE. Yes, sir; the siltation is a result of earthquake activities dating back to 1973. Over the last few years 96 percent of the watershed has been burned off.

Mr. FRANKLIN. That is the drainage request of $60,000. The only reason it wasn't impacted earlier, Mr. Chairman, we had that 2-year drought in California and it was very low water at that time.

Senator SCHMITT. So, if we desilt that, we ought to make sure there is something in place that will minimize the new siltation, such as the project.

Mr. HAILE. Such as the control burning that Mr. Franklin referred to.

Mr. FRANKLIN. We have asked the task force included within the county flood control district and the U.S. Forest Service to take a look at that, and it looks very promising, Mr. Chairman.

Senator SCHMITT. Does it include the entire Los Angeles County and San Bernardino County area?

Mr. FRANKLIN. No, this particular area is just Los Angeles County. The Governor's task force takes into account Los Angeles and San Bernardino.

Senator SCHMITT. That is what I am asking.

Please go ahead.

Mr. HAILE. That completes my statement. Thank you for the opportunity.

Senator SCHMITT. I lived in that area for 4 years, so I am fairly interested.

Mr. FRANKLIN. And I grew up in the San Fernando Valley, Mr. Chairman.

Senator SCHMITT. Maybe I didn't grow up there—well, maybe I did. I went to Cal Tech. Some people claim I never did grow up. [Laughter.]

RED BANK AND FANCHERS CREEK, CALIF.

STATEMENT OF DOUGLAS HARRISON, MANAGER, FRESNO METROPOLITAN FLOOD CONTROL DISTRICT

Mr. FRANKLIN. Mr. Chairman, our next speaker is Mr. Douglas Harrison, who is manager of the Fresno Metropolitan Flood Control District.

Mr. HARRISON. Mr. Chairman, I am appearing in support of the Red Bank and Fancher Creek projects. Our testimony is submitted on behalf of the county of Fresno, the cities of Fresno and Clovis, and the Fresno Irrigation District, whose system is affected by the watersheds. And, of course, I am representing our own flood control district.

We are appreciative of the previous support of the committee and the chance to testify, and we have submitted a detailed statement for the record. Thank you.

Senator SCHMITT. Thank you, sir.

[The statement follows:]

STATEMENT OF DOUG HARRISON, GENERAL MANAGER-SECRETARY, FRESNO (CALIF.) METROPOLITAN FLOOD CONTROL DISTRICT

My name is Doug Harrison and I serve as the General Manager-Secretary of the Fresno Metropolitan Flood Control District of Fresno County, California, the local sponsor for the Redbank-Fancher Creeks Flood Control Project. I am also authorized to speak on behalf of the County of Fresno, the Cities of Fresno and Clovis, and the Fresno Irrigation District.

Our purpose before the Committee is to request that federal funding to support construction design be included in the budget for the 1981-82 fiscal period in an amount equaling the expressed Corps capability.

The Redbank-Fancher Creeks project was initially identified in the Big Dry Creek project investigation authorized by the Congress in 1940. In 1956, the Congress specifically authorized the flood control project investigation for the Redbank and Fancher Creeks stream system. Unfortunately, federal funds for the investigation were not appropriated until Fresno County was declared a part of the 1969 California disaster area. Since that time, however, the Congress has made funds availalbe to meet the Corps' needs in the project investigation. That investigation is now complete and identifies the need for the project, proving it to be both economically justified and environmentally sound.

Noteworthy, is the fact that the Redbank-Fancher Creeks project is one which is economically justified on the basis of flood damage prevention alone. Though other benefits accrue from the project, they are not required to produce a positive benefit-cost ratio. When constructed, the project will provide protection to 51,000 acres containing a population in excess of 112,000 people at a benefit-cost ratio of 1.6 to 1.0. Total estimated average annual flood damages exceed six million dollars and affect both urban and agricultural properties. The proposed works will also protect an open irrigation canal system which transverses 210,000 acres of the world's most productive agricultural lands, Fresno County's annual production exceeding one billion dollars. The project will control the historic flooding which has seen the stream and canal systems overtop their banks an average of once every four years since 1953.

In July 1980, the completed investigation report was forwarded to the Chief of the Corps by the Board of Engineers of Rivers and Harbors. The report was subsequently forwarded to the Secretary of the Army for transmission to Congress. The project was included by the Congress in H.R. 4788 (1980) for authorization of detailed engineering and design with funds provided within that Act to support such design work. Though that legislation was not enacted, the specially worded authorization reflected the awareness of the Congress of the special needs associated with this project. Congressional action effecting the requested appropriations is critical in that it will prevent as much as two years of additional delay, saving the taxpayer an estimated twenty percent in increased project costs which would be associated with such delay.

We appreciate the privilege of appearing before the Committee and the past support the Committee has given the project. We respectfully urge your continued support and ask that our statements be made a part of the hearing record.

A more detailed presentation accompanies this request.

The people of the central county area of Fresno County, California are deeply appreciative of the opportunity to have the presentations of their representatives heard by the Honored members of the Congress. While the Redbank-Fancher Creeks Flood Control Project is not large by some standards, it is critically important to the Fresno-Clovis metropolitan area which is the business center of the most productive agricultural county in the world, average production exceeding one billion dollars annually since 1974.

This report, first submitted in May 1971, has been prepared to substantiate and support the vital need for flood control works on Redbank and Fancher Creeks. These two uncontrolled natural streams are related to and are a part of the San Joaquin-Kings River Interstream Group which were included in the San Joaquin River Basin Survey by the Corps of Engineers for more efficient management of the investigations. The Redbank and Fancher Creeks study was removed from the Interstream Group and listed as a separate project when the South Pacific Division of the Corps forwarded the completed feasibility report and the required environmental impact study to the Board of Engineers of Rivers and Harbors in July 1977.

AUTHORIZATION:
The Congress, on June 13, 1956, authorized the Corps of Engineers to investigate the feasibility of a federal flood control project for the Redbank-Fancher Creeks stream

group, this following the major floods of 1955 and 1956. Unfortunately, funds were not provided and the Corps did not begin the investigation until the area had suffered its worst flooding in history during January and February of 1969. The release of funds and the start of the investigation occurred in July 1970, some fourteen years after Congressional authorization.

PROJECT LOCATION AND NEED:
Redbank and Fancher Creeks, their tributaries and related streams addressed by the proposed project, are located on the western slope of the Sierra Nevada mountains. The watershed encompasses some seventy-five square miles and generates storm runoff which flows through the heart of the metropolitan area. The flows impact directly on the open irrigation canal system which transverses some 210,000 acres of the world's most productive agricultural land and 45,000 acres of a densely developed urban community with a population in excess of 350,000.

It is currently estimated that the flood plain to be protected by the proposed project includes 51,000 acres with a population of 112,000 (1978) and a market value in excess of 1.6 billion dollars. Total estimated average annual flood damages exceed $6,000,000 and affect both urban and agricultural properties.

HISTORY OF FLOODING:
As a result of the uncontrolled nature of the subject stream group, flooding has occurred frequently. Floods of record occurred in March 1938, December 1955, January 1956, January 1969, February 1969 and March 1978. In addition, available records indicate flooding of lesser severity occurred in 1952, 1958, 1965, 1972, and 1977 with the streams and irrigation canal system overtopping their banks on the average of once every four years since 1953.

Although the recent floods which occurred in February and March 1978 were of a lesser magnitude than those of 1969, thousands of dollars in damages to private homes, public roads, irrigation facilities and hundreds of acres of prime agricultural lands were experienced. Such floods again demonstrated the urgent need for immediate construction of flood control works.

LOCAL SUPPORT:
Following the floods which occurred in January and February 1969, the Fresno area was declared a part of California's disaster area. With the realization that millions of dollars in flood damages could have been prevented and that a recurrence of such floods would be even more devastating, a public hearing on the subject of needed flood control works was held on February 28, 1969. Hundreds of the community's citizens representing some seventy-five public and private organizations met and drafted resolutions to the U.S. Army Corps of Engineers and legislative representatives urging the active pursuit of Redbank-Fancher Creeks flood control project. Subsequently, the County of Fresno, the Cities of Fresno and Clovis, the Fresno Metropolitan Flood Control District, and the Fresno Irrigation District, authorized direct work with the Corps of Engineers and the Congress to secure adequate flood protection for the Fresno-Clovis metropolitan area.

In an effort to ensure the availability of lands needed for the required flood control structures, the County of Fresno acting jointly with the Fresno Metropolitan Flood Control District did, on October 22, 1974, effect open-space and conservation zoning of approximately 500 acres. More recently, the Cities of Clovis and Fresno, the County of Fresno, and the Fresno Metropolitan Flood Control District, signed contracts appropriating $335,000 per year to acquire the necessary project lands.

Relatedly, the California Water Commission has historically supported and continues to support the project. Further, the State Reclamation Board has submitted a supporting letter of intent for local assurances.

Most recently, a broadly based Citizens Project Advisory Committee has been created by the Flood Control District. The Committee has reviewed and confirmed the project's need and design features. The Committee is now actively engaged in drafting a financing plan to ensure the availability of the required local cost share and the equitable distribution of those costs.

ENVIRONMENTAL CONSIDERATIONS:
Upon completion and distribution of the Draft Feasibility Report and Draft Environmental Impact Statement, a public hearing was held within the project area by the Fresno Metropolitan Flood Control District, the local project sponsor, and the U.S. Army Corps of Engineers. Testimony submitted during the subject hearing indicated that there are no areas of controversy associated with the project or its limited environmental impact. In summary, the testimony received confirmed the accuracy of the Draft Environmental Impact Statement in identifying only limited impacts and the adequacy of the proposed mitigation measures. It was also apparent

SAN LUIS REY RIVER FLOOD CONTROL PROJECT

Advanced Engineering and Design

CITY OF OCEANSIDE
San Diego County
California

Total Estimated Federal Cost	Allocation Prior to FY 1981	Estimated Cost Through FY 1981	Balance to Complete	Budget FY 1982	Corps of Engineers Capability FY 1982
$2,300,000	$1,054,000	$1,364,000	$636,000	$300,000	$300,000

PROJECT HISTORY AND DESCRIPTION

The San Luis Rey River, with a tributary drainage area of 558 square miles, is one of the largest in San Diego County. Numerous destructive floods have been recorded, but the flood of 1916 was the most extreme. The flood overflow area of 3,800 acres is the residence or job site for over 6,000 citizens of the community and is valued in excess of $73 million. Most of the valley development has occurred since 1916, thereby increasing the potential damage from such a flood to $9 or $10 million. The floods of 1978, 1979, and 1980, have been particularly disastrous in terms of loss of life, loss and damage to property, outright destruction of residential and commercial land, and loss of industrial production and wages. The magnitude of the destruction is without parallel in the City's history. Control of these floodwaters is urgently and imperatively needed.

The Corps of Engineers completed a flood control project study in 1968 which recommended a control channel 7 miles in length from the ocean to protect this area of Oceanside which was estimated to cost $10 million. The City of Oceanside immediately zoned the control channel area to preserve the project right-of-way. Although the City has grown rapidly during the last 11 years, especially in the flood overflow area, no further progress toward the project was made until 1976 when funds for advanced engineering and design were appropriated. An update of the estimated project cost now appears to be approximately $23 million.

The Corps is proceeding with a review of the 1968 report as a prerequisite of preconstruction planning. The proposed allocation for fiscal year 1982 is $300,000. Each year the project costs and the probability of a disastrous flood are steadily rising. The City is most anxious to see an allocation for FY 1982 ($300,000) confirmed and completion at the earliest possible date.

that any adverse environmental impact which might be associated with the project during the brief construction period would be of a temporary nature and insignificant when compared with the permanent environmental and social benefits which would be derived by the construction of the needed works.

PROJECT FEASIBILITY AND FINANCING:
The completed report, supplemented by additional detailed studies, substantiates the need for the proposed project and identifies strong economic justification. The project costs and benefits reflected in the completed report are as follows:

Total First Costs:	$ 57,100,000	
Average Annual Costs (6-7/8% Interest)		$ 3,835,000
Total Average Annual Benefits:		
Flood Control	$ 4,956,000	
Flood Proofing Cost Reduction	285,000	
Recreation	394,000	
National Economic Development	608,000	
Total Average Annual Benefits		$ 6,243,000
Benefit/Cost Ratio 1.6 to 1		

Noteworthy, is the fact that the project is economically justified on the basis of flood damage reduction benefits alone. While other benefits are cited, they are not needed to produce a positive benefit/cost ratio. It should be noted that, while not included in the actual benefit calculations, the proposed project will also create significant beneficial effects in the areas of water conservation, groundwater management and wildlife enhancement.

The anticipated distribution of project costs between the Federal Government, the State of California, and the local sponsor is as follows:

Federal Government	$ 41,600,000
State of California	9,477,000
Fresno Metropolitan Flood Control District (Plus Annual O & M a/ $230,000)	6,023,000
Total Project Cost	$ 57,100,000

PROJECT STATUS REVIEW:
Review of the completed project report by the Division Engineer resulted in his concurrence with the investigative conclusions of the District Engineer.

Upon completion of the Division Engineer's review, additional study was undertaken at the request of the Board of Engineers, that additional study similar to that normally performed during the Phase I study which follows project authorization. Unfortunately, the additional study delayed the project for approximately two years causing an estimated seventeen percent increase in project costs.

During July 1980, the Board of Engineers of Rivers and Harbors forwarded to the Chief of the Corps of Engineers the completed project report and environmental impact report. The report was subsequently forwarded to the Secretary of the Army for transmission to the Congress.

The project has been included in legislation passing the House of Representatives each of the last two sessions of the Congress, the latest H.R. 4788 (1980). Though that legislation was not enacted, the specially worded authorization reflected the awareness of the Congress of the special needs associated with this project.

Legislation has again been introduced (1981) jointly by Congressman Pashayan and Congressman Coelho providing for final authorization. Timely action by the Congress effecting the necessary authorizations and appropriations will save as much as an additional two-year delay in the project, thereby saving the taxpayers an estimated twenty percent in increased project costs which would otherwise result.

CONCLUSION: REQUEST FOR AUTHORIZATION
On June 13, 1980, twenty-four years had elapsed since Congress first authorized the proposed Redbank-Fancher Creeks Flood Control Project. The need for the project has been identified in a total of eight different studies and investigations performed at both the local and federal level. The project feasibility investigation completed in July 1977 confirms the project need and identifies strong economic justification for project construction. Further, the more advanced and detailed technical analysis

performed for the Board of Engineers has confirmed the previous recommendations of both the District and Division Engineer of the Corps.

Because it is our belief that the proposed Redbank-Fancher Creeks Flood Control project has met all requirements for federal participation and meets all current standards of economic justification and environmental protection, we most respectfully urge the favorable action of the Committee and the Congress in authorizing the Redbank-Fancher Creeks Flood Control Project funding.

STATEMENT OF ED HOWE, PRESIDENT, KINGS RIVER WATER CONSERVATION DISTRICT

Mr. FRANKLIN. Mr. Chairman, our next speaker is Mr. Ed Howe, who is president of the Kings River Water Conservation District.

Mr. HOWE. Mr. Chairman, a number have been telling you they are farmers. I am a farmer and our family has been in the same farming area for the last 100 years.

I am authorized to appear on behalf of the support for the Red Bank and Fancher Creek flood control project. We request Federal funding in amount equal to the capability of the Corps for detailed engineering and design in the 1982 budget.

Thank you, sir, for the privilege of testifying.

Senator SCHMITT. Thank you. That is beautiful country. I have been out there.

Mr. HOWE. I was at a meeting where you spoke, Senator.

[The statement follows:]

STATEMENT OF ED H. HOWE, PRESIDENT, BOARD OF DIRECTORS, KINGS RIVER CONSERVATION DISTRICT

y name is Ed H. Howe and I am President of the Board of Directors of the Kings River Conservation District of Fresno, California. I am appearing today in support of the Redbank-Fancher Creeks Flood Control Project.

My purpose before the Committee is to request that federal funding to support construction design be included in the budget for the 1981-82 fiscal period in an amount equaling the expressed Corps capability.

The Redbank-Fancher Creeks project was initially identified in the Big Dry Creek project investigation authorized by the Congress in 1940. In 1956, the Congress specifically authorized the flood control project investigation for the Redbank and Fancher Creeks stream system. Unfortunately, federal funds for the investigation were not appropriated until Fresno County was declared a part of the 1969 California disaster area. Since that time, however, the Congress has made funds available to meet the Corps' needs in the project investigation. That investigation is now complete and identifies the need for the project, proving it to be both economically justified and environmentally sound.

Noteworthy, is the fact that the Redbank-Fancher Creeks project is one which is economically justified on the basis of flood damage prevention alone. Though other benefits accrue from the project, they are not required to produce a positive benefit-cost ratio. When constructed, the project will provide protection to 51,000 acres containing a population in excess of 112,000 people at a benefit-cost ratio of 1.6 to 1.0. Total estimated average annual flood damages exceed six million dollars and affect both urban and agricultural properties. The proposed works will also protect an open irrigation canal system which transverses 210,000 acres of the world's most productive agricultural lands, Fresno County's annual production exceeding one billion dollars. The project will control the historic flooding which has seen the stream and canal systems overtop their banks an average of once every four years since 1953.

In July 1980, the completed investigation report was forwarded to the Chief of the Corps by the Board of Engineers of Rivers and Harbors. The report was subsequently forwarded to the Secretary of the Army for transmission to Congress. The project was included by the Congress in H.R. 4788 (1980) for authorization of detailed engineering and design with funds provided within that Act to support such design work. Though that legislation was not enacted, the specially worded authorization reflected the awareness of the Congress of the special needs associated with this project. Congressional action effecting the requested appropriations is critical in that it will prevent as much as two years of additional delay, saving the taxpayer an estimated twenty percent in increased project costs which would be associated with such delay.

I appreciate the privilege of appearing before the Committee and the past support the Committee has given the project. I respectfully urge your continued support and ask that my statement be made a part of the hearing record.

A more detailed presentation accompanies this request.

The Kings River Conservation District and the people of the central county area of Fresno County, California are deeply appreciative of the opportunity to have our presentation heard by the honored members of the Congress. While the Redbank-Fancher Creeks Flood Control Project is not large by some standards, it is critically important to the Fresno-Clovis metropolitan area which is the business center of the most productive agricultural county in the world; average production exceeding one billion dollars annually since 1974.

This statement has been prepared to substantiate and support the vital need for flood control works on Redbank and Fancher Creeks. These two uncontrolled natural streams are related to and are a part of the San Joaquin-Kings River Interstream Group which were included in the San Joaquin River Basin Survey by the Corps of Engineers for more efficient management of the investigations. The Redbank and Fancher Creeks study was removed from the Interstream Group and listed as a separate project when the South Pacific Division of the Corps forwarded the completed feasibility report and the required environmental impact study to the Board of Engineers of Rivers and Harbors in July 1977.

AUTHORIZATION:

The Congress, on June 13, 1956, authorized the Corps of Engineers to investigate the feasibility of a federal flood control project for the Redbank-Fancher Creeks stream group, following the major floods of 1955 and 1956. Unfortunately, funds were not provided and the Corps did not begin the investigation until the area had suffered its worst flooding in history during January and February of 1969. The release of funds and the start of the investigation occurred in July 1970, some fourteen years after Congressional authorization.

PROJECT LOCATION AND NEED:

Redbank and Fancher Creeks, their tributaries and related streams addressed by the proposed project, are located on the western slope of the Sierra Nevada mountains. The watershed encompasses some seventy-five square miles and generates storm runoff which flows through the heart of the metropolitan area. The flows impact directly on the open irrigation canal system which transverses some 210,000 acres of the world's most productive agricultural land and 45,000 acres of a densely developed urban community with a population in excess of 350,000.

It is currently estimated that the flood plain to be protected by the proposed project includes 51,000 acres with a population of 112,000 and a market value in excess of 1.6 billion dollars. Total estimated average annual flood damages approximate $6,000,000 and affect both urban and agricultural properties.

HISTORY OF FLOODING:

As a result of the uncontrolled nature of the subject stream group, flooding has occurred frequently. Floods of record occurred in March 1938, December 1955, January 1956, January 1969, February 1969 and March 1978. In addition, available records indicate flooding of lesser severity occurred in 1952, 1958, 1965, 1972, and 1977 with the streams and irrigation canal system overtopping their banks on the average of once every four years since 1953.

Although the recent floods which occurred in February and March 1978 were of a lesser magnitude than those of 1969, thousands of dollars in damages to private homes, public roads, irrigation facilities and hundreds of acres of prime agricultural lands were experienced. Such floods again demonstrated the urgent need for immediate construction of flood control works.

LOCAL SUPPORT:

Following the floods which occurred in January and February 1969, the Fresno Area was declared a part of California's disaster area. With the realization that millions of dollars in flood damages could have been prevented and that a recurrence of such floods would be even more devastating, a public hearing on the subject of needed flood control works was held on February 28, 1969. Hundreds of the community's citizens representing some seventy-five public and private organizations met and drafted resolutions to the U.S. Army Corps of Engineers and legislative representatives urging the active pursuit of Redbank-Fancher Creeks flood control project. Subsequently, the County of Fresno, the Cities of Fresno and Clovis, the Fresno Metropolitan Flood Control District, the Fresno Irrigation District, and the Kings River Conservation District authorized direct work with the Corps of Engineers and the Congress to secure adequate flood protection for the Fresno-Clovis metropolitan area.

In an effort to ensure the availability of lands needed for the required flood control structures, the County of Fresno acting jointly with the Fresno Metropolitan Flood Control District did, on October 22, 1974, effect open-space and conservation zoning of approximately 500 acres. More recently, the Cities of Clovis and Fresno, the County of Fresno, and the Fresno Metropolitan Flood Control District, have signed contracts appropriating $335,000 per year over the next several years to acquire the necessary project lands.

ENVIRONMENTAL CONSIDERATIONS:

Upon completion and distribution of the Draft Feasibility Report and Draft Environmental Impact Statement, a public hearing was held within the project area by the Fresno Metropolitan Flood Control

District, the local project sponsor, and the U.S. Army Corps of Engineers. Testimony submitted during the subject hearing indicated that there are no areas of controversy associated with the project or its limited environmental impact. In summary, the testimony received confirmed the accuracy of the Draft Environmental Impact Statement in identifying only limited impacts and the adequacy of the proposed mitigation measures. It was also apparent that any adverse environmental impact which might be associated with the project during the brief construction period would be of a temporary nature and insignificant when compared with the permanent environmental and social benefits which would be derived by the construction of the needed works.

PROJECT FEASIBILITY AND FINANCING:

The completed report, supplemented by additional detailed studies, substantiates the need for the proposed project and identified strong economic justification. The project costs and benefits reflected in the completed report are as follows:

Total First Costs:	$57,100,000	
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Total Average Annual Benefits:		
Flood Control	4,956,000	
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Recreation	394,000	
National Economic Development	608,000	
Total Average Annual Benefits		$6,243,000

Benefit/Cost Ratio 1.6 to 1

It should be noted that, while not included in the actual benefit calculations, the proposed project will also create significant beneficial effects in the areas of water conservation, groundwater management and wildlife enhancement.

The anticipated distribution of project costs between the Federal Government, the State of California, and the local sponsor is as follows:

Federal Government	$41.600,000
State of California	9,477,000
Fresno Metropolitan Flood Control Dist. (Plus Annual O & M @ $230,000)	6,023,000
Total Project Costs	$57,100,000

PROJECT STATUS REVIEW:

Review of the completed project report by the Division Engineer resulted in his concurrence with the investigative conclusions of the District Engineer.

Since the completion of the Division Engineer's review, additional study was undertaken at the request of the Board of Engineers, that additional study similar to that normally performed during the Phase I study which follows project authorization. Unfortunately, the additional study delayed the project for approximately one year causing an estimated seventeen percent increase in project costs.

During July 1980, the Board of Engineers of Rivers and Harbors forwarded to the Chief of the Corps of Engineers the completed project report and environmental impact report. The report was subsequently forwarded to the Secretary of the Army for transmission to the Congress.

The project has been included in legislation passing the House of Representatives each of the last two sessions of the Congress, the latest H.R. 4788 (1980). Though that legislation was not enacted, the specially worded authorization reflected the awareness of the Congress of the special needs associated with this project.

Legislation has again been introduced (1981) jointly by Congressman Pashayan and Congressman Coelho providing for final authorization. Timely action by the Congress effecting the necessary authorizations and appropriations will save as much as an additional two-year delay in the project, thereby saving the taxpayers an estimated twenty percent in increased project costs which would otherwise result.

CONCLUSION: REQUEST FOR AUTHORIZATION

On June 13, 1980, twenty-four years had elasped since Congress first authorized the proposed Redbank-Fancher Creeks Flood Control Project. The need for the project has been identified in a total of eight different studies and investigations performed at both the local and federal level. The project feasibility investigation completed in July 1977 confirms the project need and identifies strong economic justification for project construction. Further, the more advanced and detailed technical analysis performed for the Board of Engineers has confirmed the previous recommendations of both the District and Division Engineer of the Corps.

Because it is our belief that the proposed Redbank-Fancher Creeks Flood Control project has met all requirements for federal participation and meets all current standards of economic justification and environmental protection, we most respectfully urge the favorable action of the Committee and the Congress in authorizing the Redbank-Fancher Creeks Flood Control Project funding.

MERCED COUNTY STREAMS SURVEY

STATEMENT OF JAY ANDERSON, SECRETARY-MANAGER, MERCED IRRIGATION DISTRICT

Mr. FRANKLIN. Mr. Chairman, our next speaker is Jay Anderson, who is the secretary-manager of the Merced Irrigation District.

Mr. ANDERSON. Mr. Chairman, I am Jay Anderson. We are here today representing the county of Merced, which is the agency sponsoring the Merced County streams group survey. I have made a written presentation for the committee.

To save time, we are here asking for the support of the committee for the amount included in the President's budget. This will save some flood damage very possible to not only the community along the river, but we are concerned about Castle Air Force Base and a major installation of the Strategic Air Command which is in constant danger of flooding. This will eliminate that.

I will ask my complete statement be part of the record. Thank you.

Senator SCHMITT. It will be made part of the record.

[The statement follows:]

STATEMENT OF JAY ANDERSON, SECRETARY-MANAGER, MERCED IRRIGATION DISTRICT, CALIFORNIA

My name is Jay Anderson, Secretary-Manager of the Merced Irrigation District in Merced, California. I am representing the County of Merced, which is the agency sponsoring the Merced County Streams. The County is joined by the Merced Irrigation District, the City of Merced, the El Nido Irrigation District, and the Le Grand-Athlone Water District.

The formulated plan of the Corps of Engineers, Sacramento District, shows that two new reservoirs, the enlargement of two existing reservoirs, and the improvement of 47 miles of channels and levees would provide for protection to about 55,000 acres of agricultural and urban areas. It would also provide protection to Castle Air Force Base, a major installation of the Strategic Air Command, its only protection now is through the use of Merced Irrigation District canals, with resulting damage and hazard to areas completely out of the flood plain. The District may be forced to stop this practice at any time. The City of Merced is vulnerable to flooding without the project.

The agricultural areas subject to flooding are planted to a variety of crops ranging from tomatoes, sugar beets, and alfalfa to grapes, almonds and peaches. Dairy and beef cattle thrive on many acres of irrigated pasture. Only about 1 percent of the 1980 crop value was under any federal or state subsidy.

Recreation facilities have been revised to meet the needs of the community, and the City of Merced has agreed to provide these facilities as part of the project.

The estimated cost is $83,100,000; the project is economically feasible with a favorable benefit-cost ratio. Average damages will exceed $6,000,000 per year without construction of the project.

The studies by the Corps were started in 1958 and led to Congressional authorization in 1970.

The Corps has completed the Phase I G.D.M., and is ready to begin the Phase II detailed plans and specifications.

This is a request that your committee support the sum of $1,244,000 as recommended by the California Water Commission, and the Corps capability to September 30, 1982. The President's budget includes this amount. The allocation of the full amount will allow the Corps to continue without interruption of this work which is so important to the Community, State and Nation.

SACRAMENTO-SAN JOAQUIN DELTA WATER QUALITY STUDIES

STATEMENT OF JOHN DeVITO, GENERAL MANAGER, CONTRA COSTA COUNTY WATER DISTRICT

Mr. FRANKLIN. Mr. Chairman, our next speaker is Mr. John DeVito, who is general manager of the Contra Costa County Water District.

Mr. DEVITO. Mr. Chairman, I am accompanied by Ernest Purcell, who is a member of the board of the Contra Costa County Water District.

I am appearing in support of ongoing delta water quality studies. Unfortunately, we are located in the western delta and our water supply is paid for in advance, is redirected by way of the Federal pumps into the San Joaquin Valley. This, of course, draws city water into the place that diverts into the delta. This saline water causes adverse impacts on human health, loss of industry productivity, high energy costs to treat the water, as well as damage to irrigated agriculture. The solution, long sought and supported some 20 years ago by the Bureau of Reclamation, was to relocate the Contra Costa Canal, a Federal project, in the lower delta. We would respectfully request your committee reinstate the $160,000 initial feasibility work for this project.

Mr. Purcell, the president of the board, and I point out the urgency. We will be happy to do as we have in the past to advance some of the feasibility funds in order to advance the project. Thank you.

Another personal note, we recognize the Land of Enchantment, Senator Schmitt. Some of my family members are there. We know your concern about migration. We will do the best to reduce the migration from California to New Mexico. [Laughter.]

Senator SCHMITT. Well, you are sending plenty of jobs right now, and we don't object to that. [Laughter.]

[The statement follows:]

STATEMENT OF JOHN E. DEVITO, GENERAL MANAGER, CONTRA COSTA COUNTY (CALIF.) WATER DISTRICT

SACRAMENTO - SAN JOAQUIN DELTA WATER QUALITY

Honorable Chairman and Committee Members, my name is John E. DeVito, General Manager of the Contra Costa County Water District, a public agency of the State of California.

For over forty years, Contra Costa County Water District by way of repayment contracts with the U.S. Bureau of Reclamation, now U.S. Water & Power Resources Service (WPRS), has been responsible for the water supply for some 300,000 people, 23 industries that employ over 16,000 employees, and 150 small farms, through the Contra Costa Canal System, the first unit of Federal Central Valley Project. The District also diverts water from the Delta under a vested water right dating back to the 1930's prior to the CVP. We depend solely and totally on the Sacramento River - San Joaquin Delta for our water supply.

Due to the WPRS's over-commitment of the CVP water supply and build-up in exports from the Delta, we are experiencing re-occurring increased salt water intrusion in the Delta, to a level that is adverse to public health, causes loss of industrial product, adds severe penalty treatment costs to all industry, and causes damage to irrigated plants.

These adverse effects on public health, industry and agriculture occurred during 1959 - 1960 - 1961, due to WPRS operations, and occurred again during the 1976 - 1977 drought, due to the obvious over-commitment of the CVP. WPRS statements indicate that these poor water quality levels will occur during normal years.

Accordingly, Contra Costa County Water District supports the conditions necessary to protect the beneficial uses in the Sacramento-San Joaquin Delta, San Francisco Bay, and Suisun Marsh as stated by the District and the California Water Commission with particular attention to:

No. 9 New Melones Lake

The Commission reaffirms its position that the appropriations should be conditioned to provide that New Melones Reservoir shall be operated in accordance with the provisions of Decision 1422 of the State Water Resources Control Board. The Commission urges expeditious acquisition of riparian habitat and flood easements downstream of the dam, and resolution of downstream salmon problems related to release schedules, flow and temperature.

No. 15 San Francisco Bay to Stockton Ship Channel

DWR and the Corps have approved a letter of agreement dated 3 February 1981, regarding the deepening of the Stockton and Sacramento Ship Channels. It provides that DWR will not object to the Corps completing construction work on the Stockton Ship Channel. If studies and tests to be conducted by the Corps determine that deepening the channels will cause a significant or measurable increase in salinity incursion, the Corps will conduct model tests of mitigation measures, including a sill in Carquinez Strait, and will recommend implementation of such measures and an allocation of the cost between the Stockton and Sacramento Ship channel projects.

The Corps should determine the Stockton Ship Channel deepening project's input on the dissolved oxygen problems in the San Joaquin River if any, and propose methods of mitigation if appropriate. We urge the Corps to complete an agreement with the Department of Fish and Game.

No. 15A Sacramento Ship Channel

Based on the letter of agreement between DWR and the Corps dated 3 February 1981, as described in "San Francisco Bay to Stockton Ship Channel" (Item 15), CWC supports the funding of detailed engineering studies for deepening the Sacramento deep water channel.

No. 33 San Francisco Bay and Sacramento - San Joaquin Delta Water Quality and Waste Disposal

San Francisco Bay and Sacramento-San Joaquin Delta Water Quality and Waste Disposal CWC supports $255 thousand for metering flows and water quality in the Bay as agreed to by the Corps and the California multi-agency letter of understanding.

No. 48 Auburn Dam and Reservoir

The Commission opposes appropriations for construction of Auburn Dam until the following have been completed:

1. Congress has reauthorized Auburn Dam.
2. A memorandum of understanding or water service contracts for 75% of the water yield have been executed.
3. Water and Power Resources Service agrees to comply with provisions of Decision 1400 of the California State Water Resources Control Board.
4. The State has approved the design of the dam finally selected.

No. 52. Fish and Wildlife Studies

The Commission supports economic, environmental and fish and wildlife studies recommended by former Secretary Cecil Andrus.

No. 56 San Luis Canal-Flood Protective Work and subsidence correction

Since Water and Power Resources Service will have expended all funds allowed under the Westlands monetary authorization, the Commission reaffirms in general its opposition to additional funds for Items 59, 60, 61 and 62 until the following conditions have been met:

1. The features of the Unit are properly authorized by Congress.
2. The water service, distribution system, and San Luis Drain contracts with Westlands are amended to include the payment provisions recommended conceptually by the San Luis Task Force.
3. The Water and Power Resources Service agrees that the federal Central Valley Project and the State Water Project will be operated to meet the identical water quality standards in the Delta.
4. Reclamation Law contains explicit provisions on residency and acreage limitation. The Commission's support of the Westlands Project will be contingent upon enforcement of Reclamation Law by Water and Power Resources Service.

No. 59. San Luis Drain

Due to recent WPRS stated intents on the location of the San Luis Drain point of discharge, Contra Costa County Water District must expand its position on behalf of the water supply integrity of not only the beneficial uses of the Contra Costa County Water District, the Bay and Delta but on behalf of all California who must bear the economic and environmental consequences of an over-committed Federal and State water supply as follows:

Insert the following amendment in the 1981 Appropriations Act:

"Provided further, that the final point of discharge for the interceptor drain for the San Luis Unit shall not be determined until:

1. Construction of the Drain extension north of Kesterson Reservoir shall not be initiated until an NPDES permit for the proposed discharge to the Delta has been issued by State Water Resources Control Board and approved by Administrator, U.S. Environmental Protection Agency.
2. Any necessary treatment facilities and storage shall be in place and fully operable prior to initiation of discharge.
3. Sufficient storage shall be provided that, if and when necessary, discharge to Delta water could be limited to those times during the tidal cycle when the discharge would have minimum adverse impact on Delta water quality.
4. The Drain system shall be so designed, constructed and operated that discharge to Delta waters could be stopped during critically dry periods.
5. Those entities discharging to the Drain shall be required to develop and implement conservation programs which will minimize the discharge of both water and pollutants to the Drain.
6. A continuing detail monitoring program shall be carried on.

No. 68 - 74 San Felipe Division

The Commission urges the Congress to provide that diversions of water from the Delta by the Water and Power Resources Service be subject to federally approved Delta water quality standards. The Commission affirms that it is desirable that the WPRS operation in the entire area conform to provisions of reclamation Law, including those provisions which relate to residency and acreage limitations.

No. 79 Contra Loma Res. Rec.
Facilities

This project represents first implementation of the Federal Recreation Act on November 5, 1965, with the local sponsor, the East Bay Regional Park District, advancing matching funds.

No. 93 Feasibility Investigations
Kellog Unit Reformation
Delta Division

Commission supports funding of feasibility investigation of Los Vaqueros Reservoir and relocation of Contra Costa Canal intake.

State and WPRS have executed a memorandum of understanding dated December 12, 1980 regarding a joint investigation of the Los Vaqueros-Kellog project including relocation of Contra Costa Canal intake. Commission supports $10 ($10,000) for fish and wildlife studies.

Furthermore, it should be noted that WPRS and U.S. Corps of Engineers' Sacramento-San Joaquin Delta studies reflect amounts of total Federal costs of $17,105,000. In order to eliminate duplication and realize maximum dollar benefits to public purpose objectives, we respectfully suggest that the Committee consider coordination of these Delta studies under one regimen of responsibility.

In summary, our comments in the past and specifically at this time, recognize and commend the wisdom of the Congressional enactment of Public Law 95-46 -- The San Luis Task Force Study -- which study "points to the need for profound changes in Bureau of Reclamation (WPRS) procedures in some instances and legislative changes in others".

Please accept our appreciation for this opportunity to appear, and may this statement be made part of the record.

SANTA MARGARITA PROJECT, CALIFORNIA

STATEMENT OF JACK FORD, ATTORNEY, REPRESENTING FALLBROOK PUBLIC UTILITY DISTRICT

Mr. FRANKLIN. Mr. Chairman, our next speaker is Mr. Jack Ford, who is a consultant, who will talk about the Santa Margarita project.

Mr. FORD. Good afternoon, Mr. Chairman. My name is Jack Ford. I am an attorney with the Washington law firm of Pope, Ballard & Loos. I am appearing today as a representative of the Fallbrook Public Utility District in support of appropriations to the Water and Power Resources Service for the updating of the feasibility study and the environmental impact statement on the Santa Margarita project, and we are requesting $260,000 for this purpose in 1982.

The Santa Margarita project has significant municipal, industrial, irrigation, and military water supply elements, and, particularly for Camp Pendleton Marine Corps Base, significant flood control.

This supplemental water supply will be most essential to the economic survival of the 16,000 residents of the area in the event excess imported water ceases to be available, which could be at the end of this decade when Arizona takes its legal allotment of river water.

The revised feasibility study and the final environmental impact statement were completed in 1974 and 1976, respectively. New water project requirements mandated by recent policy changes, as well as new environmental concerns that have come to light in the interim, require an updating of these studies, and we request $260,000.

On behalf of the Fallbrook Public Utility District, I thank you for this opportunity to present testimony.

Senator SCHMITT. Does DOD support your request?

Mr. FORD. The DOD report has not been put forward, but I can say they do support it. They have been asked for a report that is coming, and they do support the project. The Marine base at Camp Pendleton has suffered severe flood damage in the past.

Senator SCHMITT. Thank you.

Mr. FRANKLIN. I might add, Mr. Chairman, that particular district probably has the highest use of water conservation of any district in the State of California simply because they are paying now in excess of $150 a foot to irrigate. Their basic crop is avocados.

[The statement follows:]

STATEMENT OF JACK FORD, REPRESENTING FALLBROOK PUBLIC UTILITIES DISTRICT

SUMMARY

The Fallbrook Public Utilities District respectfully requests the appropriation of $260,000 to the Water and Power Resources Service appropriations for Fiscal Year 1982 to begin up-dating the feasibility study and the environmental impact statement for the Santa Margarita Project in northern San Diego County. The WPRS has indicated that a total of $560,000 will be needed over fiscal years 1982 and 1983 to up-date these studies.

Mr. Chairman, Members of the Committee, my name is Jack Ford and I am an attorney with the Washington, D.C. law firm of Pope Ballard & Loos. I am appearing before you today as the representative of the Fallbrook Public Utility District of Fallbrook, California, in support of appropriations to the Water and Power Resources Service for the up-dating of the feasibility study and the environmental impact statement for the Santa Margarita Project in northern San Diego County. We are requesting $260,000 for this purpose in fiscal year 1982, and an additional $300,000 will be requested for the next fiscal year in order to complete the up-dating of these studies.

BACKGROUND

The Santa Margarita Project is a part of the California Water Plan designed to provide a means for impounding, conserving and utilizing the flows of the Santa Margarita River, a coastal stream north of San Diego, California.

The Project facilities include: two dams and reservoirs, one approximately two miles north of Fallbrook, and the other on the Marine Corps base at Camp Pendleton; water conveyance lines from one reservoir to the Fallbrook Public Utility District distribution system and from the other reservoir through Camp Pendleton; park and recreational facilities; road access across the reservoir; and wildlife wilderness areas and fish hatcheries.

The Project has significant municipal, industrial, irrigation and military water supply elements, and, particularly for Camp Pendleton, significant flood control elements.

This supplemental water supply will be most essential to the economic survival of the 16,000 residents of the area in the event excess imported water ceases to be available. The Fallbrook Public Utility District, which serves an area of 16,104 acres, relies almost entirely on imported water obtained through the County Water Authority and the Metropolitan Water District aqueduct systems for its water requirements which are presently 68% for irrigation and 32% for municipal use. The present consumption of 13,200 acre feet of imported water annually is approximately three times greater than the District's legal entitlement to imported water.

The reservoir of water stored behind the Fallbrook Dam will provide a reserve supply which could be utilized in the Fallbrook area for several years in the event of a natural or manmade catastrophic disruption to any of the imported water-delivery facilities on which the area is now totally dependent.

The project facilities will provide an alternate source of water supply for the Marine Corps base at Camp Pendleton, the U.S. Naval Hospital and the Naval Weapons Station, Fallbrook Annex. The base presently relies upon underground water as its sole source of supply, and the Department of the Navy considers the development of an alternate source vital to protect its continually increasing investment in this huge base complex.

To make use of a local water source in lieu of importing water is not only a sound economical practice, but will eventually become a necessity, if all the future demands for fresh water in this state are to be met. The future anticipated demands for fresh water in southern California will necessitate making maximum utilization of all available sources of this increasingly valuable natural resource to augment the vast quantities of water which now must be moved hundreds of miles from northern California and the Colorado River to supply the demand.

REQUEST

The revised feasibility study and the final environmental impact statement were completed in 1974 and 1976, respectively. New water project requirements mandated by recent policy changes, as well as new environmental concerns that have come to light in the interim, require an up-dating of these studies before moving forward to construction.

The Water and Power Resources Service has indicated, in a letter to the California State Water Commission, that it will require two fiscal years -- 1982 and 1983 -- to complete this required up-date. The up-dating, according to WPRS, will address the current appropriateness of the dam design, water yield, project economics and environmental impacts. WPRS has estimated that additional studies would cost $560,000 over the two-year period. Included in that amount is $375,000 for geology data, safety of dams and seismic analyses, and additional design work which may be required to meet current standards. Also included is an estimated $85,000 to up-date the Fish and Wildlife Coordination Act report, prepare the appropriate environmental documents and coordinate with the involved agencies. The reevaluation of the hydrology and economics in the feasibility report is estimated at $100,000.

Mr. Chairman and members, on behalf of the Fallbrook Public Utility District, we respectfully and most urgently request a favorable consideration for the augmentation of the present budget by $260,000 for fiscal year 1982 in order to begin the up-dating of these studies. We very much appreciate the opportunity to present this testimony to the Committee.

GLIDE WATER DISTRICT IMPROVEMENT DISTRICT NO. 1 LOAN

STATEMENT OF MARSHALL JONES, CONSULTING ENGINEER, GLIDE WATER DISTRICT

Mr. FRANKLIN. Our next speaker is Mr. Marshall Jones, consulting engineer for the Glide Water District.

Mr. JONES. Mr. Chairman, I am Marshall Jones, appearing on behalf of the Glide Water District in the Central Valley project. With me today is Mr. Robert Feeney, district engineer, and Noralu Michael, secretary of the district.

The canal is complete and full of water, so the next step is to build a distribution system to bring the water to individual landowners. The district is seeking $290,000 under Public Law 130 loan for fiscal year 1982. The district's application was not processed by the Interior Department in time to have the funds in the administration's budget. But everything will be in order by the start of fiscal 1982 and the district can start building this system. We appreciate very much your consideration of this money to get started.

Senator SCHMITT. I may have misunderstood. You said in your statement $390,000 and in your testimony $290,000.

Mr. JONES. Pardon me, $390,000.

Senator SCHIMTT. $390,000?

Mr. JONES. Yes. Don't drop a hundred thousand dollars.

Senator SCHMITT. I thought you found a hundred thousand. [Laughter.]

[The statement follows:]

STATEMENT OF MARSHALL JONES, ENGINEER, GLIDE WATER DISTRICT

I am Marshall Jones, Engineer for Glide Water District in the service area of the Tehama-Colusa Canal, Sacramento River Division of Central Valley Project.

The Tehama-Colusa Canal is complete and ready to serve irrigation water this year. A distribution system now is needed to deliver water from the Canal to individual landowners. Our District is applying for a loan under Public Law 84–130 to finance construction of our system. The application soon will go to the Secretary of Interior for approval and we will be ready to design the system and start construction in Fiscal Year 1982. Our schedule shows a need for $390,000 in Fiscal Year 1982. The application was not sufficiently advanced last year for funds to be included in the President's budget so, we respectfully request you to add the $390,000 to your budget. Parts of the District are now under irrigation from failing groundwater supplies so our system is urgently needed. Additionally, our purchases of water are what repay the federal investment in the Tehama-Colusa Canal.

The Glide Water District Improvement District No. 1, for which we are seeking funds, includes some 4,900 irrigable acres, of which about 3,300 are being irrigated, in the service area of the Tehama-Colusa Canal of the Central Valley Project. Rapidly increasing land values and rising taxes make it urgent that lands now relying on groundwater supplies, which are failing, continue to be irrigated and that the lands now being dry-farmed be brought under irrigation soon. Irrigated agricultural produces from five to six times the value of products per acre over that of dry-farmed production. Also, much of the produce grown in the District is exported. Agricultural exports are a major factor in meeting foreign exchange requirements of the United States.

The Tehama-Colusa Canal was authorized by Congress in 1950 and during the intervening years many landowners have spent money on development of their lands in anticipation that water would become available. Hence, it is urgent and fair that the distribution system be completed as soon as possible. Further, repayment of the federal investment in the Tehama-Colusa Canal depends upon purchases of water by the irrigators.

The District respectfully requests your Committee's approval of including in the FY 1981 budget the $390,000 needed for our project. We greatly appreciate the help the Committee has provided in development of the Central Valley Project which will mean so much to our people in the future.

YUBA COUNTY WATER AGENCY LOAN

STATEMENT OF DOUGLAS WALTZ, CHAIRMAN, YUBA COUNTY WATER AGENCY

Mr. FRANKLIN. Mr. Chairman, our next speaker is Mr. Douglas Waltz, who is chairman of the Yuba County Water Agency.

Mr. WALTZ. Thank you, Mr. Chairman. I have with me the general manager of the agency, Mr. Donald Frost.

Our project is a Public Law 984 loan. It is a multiple facet loan. The Yuba County Water Agency and three user water districts are suppliers of the loan. We are requesting $600,000 to be included in this fiscal year budget. The entire Public Law 984 loan is $20,960,000. We need the application approved and the loan funds this year so we can start our bonding for the next year in the amount of roughly $6.5 million. Your consideration would be appreciated. Thank you.

Senator SCHMITT. Any gold left in Yuba County?

Mr. WALTZ. Well, St. John's Farm is dredging up again.

Senator SCHMITT. When I was in graduate school, I did a little photographic study of the gold gravels of Yuba County.

Mr. WALTZ. They are still there.

[The statement follows:]

STATEMENT OF DOUGLAS WALTZ, CHAIRMAN, BOARD OF DIRECTORS, YUBA COUNTY (CALIF.) WATER AGENCY

The Yuba County Water Agency is seeking a Federal Loan under PL84-984 to build the South County Irrigation Project. In order to initiate the project the Agency requests that the amount of $600,000 be included in the Federal Budget for fiscal year 1981-82. The funds will be entirely repaid from project revenues.

Proposals to provide Yuba River water to south Yuba County were developed as early as 1954. A diversion dam and canal system were included as part of the Agency's New Bullards Bar Project, which began operation in 1969. The Agency holds the permits for the water which will be supplied from storage in New Bullards Bar Reservoir. However, lack of available funds caused deletion of the South County Irrigation facilities from the first stage hydroelectric and irrigation project.

Agricultural activity in the south County has continued despite the lack of surface water. The continuing development has caused ground water levels to drop nearly eighty feet during the past sixty years. Current overdrafts result in lowering ground water levels an average of more than four feet per year. If the rapidly declining supply of ground water is not replaced with surface water, production of agricultural products must be reduced because new exploration has exposed non-water bearing strata or evidence of salt water intrusion. Rice, one of the United States's most important export crops, will be the principal crop affected by the production loss. .

All of the water to the south County will be distributed on a partnership basis, utilizing the facilities of Wheatland Water District, South Yuba Water District and Brophy Water District. The additional 104,500 acre feet of irrigation water that will be provided annually by this project is only sufficient to balance the present overdraft which now occurs. By stablizing the water level and reducing the dependence on pumps, the project will save eight million kilowatt hours of energy per year.

An additional 13,400 acre feet will also become available for domestic use at Beale AFB and to two nearby developed communities, served by Linda County Water District and Olivehurst Public Utility District and having a combined total permanent population of 28,000.

Portions of the service area are now experiencing ground water quality problems.

The final application for the loan was submitted in July 1980 and has been processed through the Regional Office of the Department of Interior, Water and Power Resources Service. The application is now in the Commissioner's office in Washington, D.C. The rate of repayment has been set to utilize the maximum payment capacity of the water users.

Mitigation measures will be provided to compensate for the loss of fish and wildlife habitat.

A summary of the most important features of the project are listed below:

- Diversion structure on the Yuba River, consisting of an inlet structure, tunnel and fish screen/return system.
- Concrete lined 500 cfs, 5.7 mile main canal from the diversion structure to a bifurcation structure at the north boundary of Beale Air Force Base.
- Concrete lined 400 cfs reducing to 150 cfs, 16.2 mile Beale canal across Beale AFB then along its southern boundary and South Beale Road to the intersection of South Beale Road and Highway 65. This canal would serve the South Yuba and Wheatland Water Districts.
- Concrete lined 250 cfs reducing to 200 cfs, 4.8 mile West Branch canal along the north boundary of Beale AFB to the western tip of Beale to the North Beale Road. This canal would serve lands in the Brophy Water District and convey water for municipal users.
- Approximately 57 miles of distribution system canals to be operated by the participating districts, and serving a gross area of about 40,000 acres.

The California Water Commission unanimously supported the project which is scheduled to be funded as follows:

Fiscal Year 1982	$ 600,000
Fiscal Year 1983	$ 8,400,000
Fiscal Year 1984	$12,600,000

The Yuba County Water Agency acknowledges its obligation to raise its matching share of the funds, $6,636,000, and respectfully requests formal action by your Sub-Committee to authorize the Federal appropriation.

COLUSA COUNTY WATER DISTRICT LOAN

STATEMENT OF KENNETH ROMINGER, DIRECTOR, COLUSA COUNTY WATER DISTRICT

Mr. FRANKLIN. Mr. Chairman, our next speaker is Mr. Ken Rominger, who is the director of the Colusa County Water District.

Mr. ROMINGER. Mr. Chairman, I am a director of the Colusa County Water District and service area. I do have a little support with me: Mr. Ray Charter, Cynthia Peterson, and Mr. Jones.

The reason we are here today is to secure additional funds to complete a distribution system. We have applied for a loan through Public Law 84-130 to complete it. Our present schedule calls for a need of $846,000 in the fiscal year 1982. This money is not in the President's budget, so we request your approval since this would be an ongoing project. And I might say we have farmers and landowners in our district that are very anxious to put water on our land, and the only way they can is to get a distribution system completed. So we are most anxious to have you approve this. Thank you very much.

Senator SCHMITT. Thank you, sir.

[The statement follows:]

STATEMENT OF KENNETH ROMINGER, DIRECTOR, COLUSA COUNTY (CALIF.) WATER DISTRICT

I am Kenneth Rominger, Director of the Colusa County Water District in the service area of the Tehama-Colusa Canal, Sacramento River Division of Central Valley Project.

SUMMARY

The Tehama-Colusa Canal of the Central Valley Project is complete and ready to serve irrigation water. A distribution system now is required to deliver water from the Canal to our individual landowners. Our existing 9(d) contract funds are inadequate for the Water and Power Resources to complete our system so we are applying for a Public Law 84-130 to complete construction. Our loan application is well advanced and we will be in a position to design the system and initiate construction in Fiscal Year 1982. Our schedule shows a need for $846,200 in F.Y. 1982. The President's budget does not include funds for this loan so we respectfully request your approval of this amount. Our landowners are faced with failing groundwater supplies and loss of large investments unless water is made available soon from the Tehama-Colusa Canal. Further, repayment of the United States' investment in the Canal is dependent upon sale of water.

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The Colusa County Water District includes 40,000 acres, of which about 25,000 is irrigated, in the service area of the Tehama-Colusa Canal. Increasing land values and rising taxes make it imperative that lands now using the failing groundwater supplies continue to be irrigated and that the now dry-farmed lands be brought under irrigation soon. Conversion from dry-farmed to irrigated crops usually results in a five or six-fold increase in value per acre of produce grown. Rapidly rising food prices demonstrate the need for such increases in production. Also, much of the produce grown is exported. Such exports are an important factor in meeting the nation's foreign exchange requirements.

The Tehama-Colusa Canal was authorized by Congress in 1950 and construction started in 1965. The Canal is complete and ready to serve water this year. Many landowners have spent money on development of their lands in expectation that water would be available. Hence it is essential that the distribution system be financed and built soon. Also, repayment of the Government's investment in the Tehama-Colusa Canal depends upon sale of water to the irrigators.

Our District in 1965 signed a 9(d) contract for a $14,800,000 loan to build our distribution system. A portion of the system was built to serve 10,000 acres from a temporary water supply. The remaining $9,000,000 under the contract now is insufficient to complete the system. We are applying for a supplemental loan under Public Law 84-130 to complete it. Our application is in the Office of the Secretary of Interior for approval. Our schedule calls for $846,200 in Fiscal Year 1982 for design and start of construction. It is urgent that our system be completed and we respectfully ask that you include the necessary funds in the F.Y. 1981 budget.

The people of our District greatly appreciate the assistance the federal reclamation program provides and your Committee's past help in financing the irrigation facilities.

SACRAMENTO RIVER, CHICO LANDING TO RED BLUFF BANK EROSION PROJECT

STATEMENT OF JUDI JOHNSON, SUPERVISOR, TEHAMA COUNTY, CALIF.

Mr. FRANKLIN. Mr. Chairman, our last speaker this afternoon is Judi Johnson, who is a member of the board of supervisors of Tehama County.

Ms. JOHNSON. Thank you very much. Thank you for allowing us to come today. I have filed a statement for you all, and I would like to ask your support for the Cottonwood Creek project that has been supported by the State.

But we also really desperately need funding for the Chico Landing to Red Bluff section along the Sacramento River. The Sacramento River is used as a canal from the Shasta Dam project, which is federally funded, and the banks are badly being eroded through the service area in Tehama County. This project has been funded in the past on a 50–50 basis. We would appreciate your help. Thank you.

[The statement follows:]

STATEMENT OF JUDI JOHNSON, SUPERVISOR, TEHAMA COUNTY, CALIF.

Thank you for this opportunity to ask for support for vital Northern California water projects.

It is my hope that you will continue the appropriations for authorization of the Cottonwood Creek Project, as this will be a vital link not only in the California State Water Project, but also for the continuation of the alleviation of water shortages for food and fiber production and recreation in the north state.

A chief concern today is the continued 1 million dollar appropriation for the Chico Landing to Red Bluff Project. Each year acres of productive and protective lands are washed from the banks of this unprotected canal, also called the Sacramento River, due to lack of funding and cooperation with State Agencies. Six sites were recommended in 1978 as being critical for immediate work. With over 50 percent of the projects already completed, these sites would provide substantial protection for farm lands, natural habitat and desiltification of the Delta.

On one three thousand foot stretch of river bank 30 of the 40 acres have been lost in an area set aside for preservation of natural oaks, grasses and wildlife. The cost benefit ratio on this piece of property alone is figured to be 1.95. The other five sites currently abut productive but threatened orchard lands.

There has been some concern that these dollars are going to protect a few privately owned farms and that perhaps tax dollars should be spent on the masses. But I would say to you that a cost benefit ratio which exceeds one at each of these six sites are dollars well spent for food production and wildlife and Delta protection.

Northern California supplies a large part of the food for the United States—especially the Western Region. Water and energy for such large scale production is an ever increasing concern. But without basic protection for the land itself, our ability to assist in food production will be severely limited. Therefore, this one million dollar investment can be counted on for return many times over.

Mr. FRANKLIN. Mr. Chairman, that concludes our testimony. I want to thank you and your committee for all the help that you have given us in the past.

Senator SCHMITT. Well, the committee wants to thank you and MR. Abbott for your hard work in organizing and coordinating the presentation today. Without you, this would probably not be possible.

And I also want to thank each of the witnesses, and all of those who have come so far, to present testimony today. It is important to have your input and to know of your interest.

ADDITIONAL PREPARED STATEMENTS

Mr. FRANKLIN. Mr. Chairman, there are some additional statements which have been submitted that we ask be made part of the record.

Senator SCHMITT. Without objection, those will be included, along with any additional statements which may have been delayed.

Again, thank you all.

[The statement follows:]

STATEMENT OF TIMOTHY V. A. DILLON, WESTLANDS WATER DISTRICT

The Westlands Water District is a public body organized and operated in accordance with the provisions of the Water Code of the State of California. The District manages the sale and delivery of water from the San Luis Unit of the Federal Central Project. Westlands' service area comprises some 600,000 acres of land situated on the west side of the San Joaquin Valley in Fresno and Kings counties, California.

My purposes in appearing here today are twofold. The first is to enlist the Subcommittee's approval of the following items in the President's budget pending before you:

Central Valley Project Feature	President's Budget
San Luis Drain	$4,700,000
Westlands W. D. Distribution System	400,000
Westlands W. D. Drainage Collector System	100,000

Additional appropriations authority will be needed to complete the Westlands Water District distribution and drainage collector systems. Such legislation will be sought in the current Congress upon successful completion of contract negotiations between Westlands and the United States. The amounts budgeted for thses items will finish work under two contracts that are essentially complete.

The $4.7 million included in the President's budget for the San Luis Drain will fund enlargement of the Kesterson Reservoir, a regulating reservoir, wildlife marsh, and evaporation basin which is an integral part of the Drain. At the present time 100,000 acres within the San Luis Unit have a perched saline water table within ten feet of the ground water surface. This situation is causing some lands to lose their productivity. As farmers install drain tiles to restore productivity, the drain water produced thereby will be ponded in an enlarged Kesterson Reservoir pending completion of the Drain to a final discharge point.

My second purpose today relates to an important matter currently under hearing before the California State Water Resources Control Board, namely, the issuance of a discharge permit for the disposal of subsurface saline agricultural drainage water into the Western Sacramento-San Joaquin Delta. The Interior Department's Water and Power Resources Service (WPRS) is the applicant in that proceeding being conducted pursuant to the provisions of the National Environmental Policy Act.

There are legislative precedents which are pertinent to the WPRS's pending permit application. One is this Subcommittee's consistent action in conditioning appropriations for the San Luis Drain on the discharge of drainage waters being done in an environmentally safe manner. Another is the recent act of October 3, 1980, Public Law 96-375 (95 Stat.1505) which, among other things, authorized the " San Joaquin Valley Drainage Investigation with a study area in the San Joaquin River Basin, Tulare Basin, and the Sacramento-San Joaquin Delta-Suisin Bay area of California".

Before the issuance of a discharge permit, the State Board will rightfully require studies aimed at assuring that disposal of drain waters will not be environmentally damaging.

In order to facilitate the conduct of these important studies, Westlands urges that $1.400,000 be appropriated to the WPRS for the fiscal year 1982 under the authorization contained in P.L. 96-375. Appropriation of $350,000 to the WPRS for the fiscal year 1981 would greatly expedite these vital studies.

Your approval of these funds is urgently recommended.

STATEMENT OF JOHN S. HARNETT, GENERAL MANAGER, EAST BAY (CALIF.) MUNICIPAL UTILITY DISTRICT

SUMMARY

The East Bay Municipal Utility District supports the recommendations of the California Water Commission with regard to recommended appropriations for the Federal Flood Control and Reclamation Programs in California for Fiscal Year 1981-82. Specifically, the District urges appropriations for the following projects: reference California Water Commission Summary dated March 6, 1981.

No. 31	Completion of the Corps Survey Report concerning the Sacramento-San Joaquin Delta	$ 190,000
No. 48	WPRS Engineering and Economic Studies concerning Auburn Dam and Reservoir	2,841,000
No. 54	WPRS EIS and other preliminary work concerning the Folsom-South Canal	400,000
No. 99	WPRS Delta support studies	1,312,000

The East Bay Municipal Utility District supplies water for municipal and industrial purposes to a 300 square mile area in Alameda and Contra Costa Counties, located on the eastern side of San Francisco Bay. This water is served to 1.1 million people who reside in that area.

The District has a direct interest in the completion of the Auburn-Folsom South Project for two reasons: first as a contractor for project water and, second, as an indirect beneficiary in that part of the service area which encompasses the lower Mokelumne River. This latter interest relates to the substantial groundwater pumping in that area which results in increasing seepage losses from the Mokelumne River. Much of the seepage loss must be made up by releases of water stored by the East Bay Municipal Utility District for its own use, and, as the losses increase, the safe yield of the District's Mokelumne River Project is reduced proportionately. Since the Mokelumne River Project supplies 95 percent of the District's water, the project yield is of major concern.

An imported surface supply from the Auburn-Folsom South Project has been the expected solution to this problem for many years. Furthermore, the District provides storage, on an interim basis, to agricultural interests along the lower Mokelumne River, who also have looked to this project to meet their long-term water requirements. Without the Auburn Dam and the Folsom South Canal, their water requirements will eventually have to be met from increased groundwater pumping. This was exactly the situation that occurred during the recent drought which resulted in alarming declines in the groundwater table.

Recently the District has been working with San Joaquin County interests to examine the feasibility of utilizing the groundwater basin conjunctively with a surface supply brought to the area by an extension of the Folsom South Canal constructed by either the Water and Power Resources Services or by local interests. The first phase of this study will be to develop a model and analyze the characteristics of the groundwater basin.

The District urges the Congress to support funding for Auburn Dam in the amount of $2,841,000 to enable completion of economic studies and to initiate final design and preparation of specifications for the much needed project. The Congress is further urged to support appropriation of $400,000 for the Folsom South Canal to provide for completion of the Environmental Impact Statement and for right-of-way surveys plus other preliminary efforts necessary to move toward completion of the canal.

The District also requests Congress to appropriate funds needed so the Corps can complete its survey report intended to ascertain the extent of federal, state and local participation in Delta levee rehabilitation and repair. There is an increasing incidence of flooding in the Delta islands due to levee failure with great financial loss to agriculture and other facilities. In 1980 a levee failure and resulting failure of a railroad embankment in the Jones Tract gravely endangered the security of this District's Mokelumne Aqueduct system and the water supply to over one million people in the East San Francisco Bay Area. A cooperative program of rehabilitation and repair is needed to preserve the agricultural production, water and transportation facilities, and to protect Delta water quality which is vital to the operations of the State Water Project and the federal Central Valley Project. Completion of the Corps report is an essential step in developing such a program. The District urges the appropriation of $190,000 to complete the Corps survey report.

The District also supports the appropriation of $1,312,000 for Delta support studies to be made by the federal Water and Power Resources Service. A great deal of data is required concerning the Sacramento-San Joaquin Delta with regard to existing and potential problems. The state and federal government must necessarily coordinate their planning and operations in the Delta. Since both the State Water Project and the federal Central Valley Project utilize the Delta to convey water to their export pumping plants, the Service should have comparable funds to work with the state and to meet its responsibilities toward the Delta.

O'Neill Unit, Nebraska

STATEMENT OF ALFRED T. DRAYTON, NORTH CENTRAL NEBRASKA RECLAMATION DISTRICT AND THE NIOBRARA BASIN IRRIGATION DISTRICT

ACCOMPANIED BY:

- JACK ODGAARD, EXECUTIVE VICE PRESIDENT, NEBRASKA WATER RESOURCES ASSOCIATION
- CLYDE BURDICK, MEMBER OF THE BOARD OF DIRECTORS, NIOBRARA NATURAL RESOURCE DISTRICT
- (SHORTY) MILES, NEWSPAPER PUBLISHER
- LEONARD SCHAEFER, SECRETARY, NEBRASKA BUILDING AND CONSTRUCTION TRADES COUNCIL
- FRANCIS BEJOT, FARMER, AINSWORTH, NEBR.

Senator SCHMITT. Our next witness is Mr. Alfred Drayton, president of the board of directors for the North Central Nebraska Reclamation District.

Mr. Drayton, I presume you are going to orchestrate this affair, so please proceed.

Mr. DRAYTON. Well, first we want to thank you for taking time to listen to us.

Senator SCHMITT. You are half a continent closer than California. Why don't you have as many people? [Laughter.]

Mr. DRAYTON. We are not as well fixed as they are in California.

Senator SCHMITT. Please proceed.

Mr. DRAYTON. First, I better explain we had a gentleman here to make a statement for the Governor, but in order to catch a flight he had to leave, so I have submitted the Governor's letter for the record.

Senator SCHMITT. We appreciate that and apologize we didn't get to you earlier.

Mr. DRAYTON. It can't be helped sometimes. He was also representing the Nebraska Natural Resource Commission that handles a good share of our business in Nebraska relating to water.

We are still in court. We have a second supplemental to our environmental impact statement. It is about complete and we will be in court again by the first of June. We expect it to be handled OK this time, but this is the third trip.

The water levels still decline in our wells up there, and on top of that we are getting troubles from nitrate, that the project would stabilize and we would be in much better shape.

Senator SCHMITT. Did you say nitrate?

Mr. DRAYTON. Nitrate is getting into the water due to the way they are operating. We have no control over it at this time, but we will have contover over the operation when the district is actually in operation. We can't do it before that. We have no right.

We have over 200 letters that we intended to bring in, but due to the change in time that was set, of course, from Monday, why we just couldn't get them together. We will ship them in to you when we get home.

INCREASE IN LOCAL COST SHARE

The most important part of my statement is we have two resolutions that have been handed in that the reclamation district and irrigation district passed a few days ago at the last meeting. These resolutions asked us to inform you we are willing to increase our annual payment per acre. The way it is set up now, it will be $5.65 a year more from each district, which is not $11.30. What we are also going to do is increase the annual payment from the irrigation district. We are going to double it. That will make a total of $16.95 instead of $11.30. In doing this it will increase our total payment to the project by the irrigators $21,725,500. We think we are probably the only ones to ever offer to increase before we even start.

Our contract states that at the end of every 10 years we are subject to an increase of not over 20 percent, whatever happens with inflation. We want to take our part in it and do whatever is required, whatever is right. The original figure was set apparently for all time, but we are not going to make it that far. We want to keep up with what is necessary. Construction costs have gone up tremendously, and we understand that.

That would be all I have to say, but we have with us Clyde Burdick who will make a short statement.

Senator SCHMITT. Please go ahead.

Mr. BURDICK. Thank you. My name is Clyde Burdick and I am from Ainsworth, Nebr. I am a member of the board of directors of the Niobrara Natural Resources District, in which the Norden Dam and Reservoir and Spring View portions of the project lands are located.

Our natural resource district is very much concerned about the conservation of our water and putting it to use. The district has long supported this project, and we wish to say now we continue to support it and hope that you will provide funds for its continuation.

I am also president of the Niobrara River Basin Development Association. This is an organization of farmers, ranchers, businessmen, people in the Niobrara River Basin from one end of the river to the other that have, since 1946, been trying to develop irrigation projects in that basin in order to improve the economy and increase the production to the extent that we will be able to continue to support our expanding population in that area. Without water, we cannot do this. Without water for our land, we will have difficulty keeping our young people on the farms and ranches. Our association has long been pushing and trying to develop these kinds of projects, and we hope you will see fit to approve funds for that purpose.

We feel it is a sound project and it will substantially increase food production and with a minimal loss of good soils that will be taken out by the reservoir and other project requirements. It will provide an available water supply for the 77,000 acres of prime land and it will provide irrigation for about 30,000 acres of dry-land farming, a highly productive area. It will insure production where groundwater sources for irrigation are being depleted. This is an area that has the most concentrated number of center irrigation of any place in the United States that I know of, and we are rapidly drawing down our groundwater basin. We are seriously concerned about that and we think bringing water in for the O'Neill project we can replenish the groundwater and maintain the stability of that groundwater supply. Also, as Alfred mentioned, by bringing in additional water, we should begin to help to stabilize the chemical problems he mentioned with the chemical nitrates in the water.

There are few areas I know where we can build a project like this and not destroy a lot of good farmland.

We thank you for the opportunity to appear here before you, and we hope you do give serious consideration and provide us funds for the projects. Thank you very much for the opportunity to appear here.

Senator SCHMITT. Thank you.

Mr. DRAYTON. Next is Jack Odgaard.

Mr. ODGAARD. Thank you. I represent the Nebraska Water Resources Association, a private association statewide. We have some 1,500 members.

I appreciate the committee being able to handle us today and I have notified the staff I have relinquished my scheduled time on Monday.

Mr. Chairman, if I may, I would like to get up and refer to some charts we have here. You do have a detailed statement that I have prepared that includes a rather large accumulation of material, and I realize the committee report may not include that material, but for future reference you may refer to it for the groundwater concerns for the State of Nebraska.

This map is prepared conjunctively with the U.S. Geological Survey and the Conservation and Survey District of the University of Nebraska. What the map has been prepared to show is changes in groundwater levels throughout the State of Nebraska from times considered to be predevelopment to the present time. The color slide on this map of red, yellow, and green indicate underground water declines and increases. Over that we have superimposed existing, proposed, and planned study surface water projects of the past.

I know one conclusion that can be drawn. All hydrologists and geologists in the State of Nebraska will testify wherever we have had a substantial groundwater increase in the State of Nebraska it has been due to surface water development, where we have reservoirs, irrigation systems, and canals. This one large area through central Nebraska here was the Central Nebraska Public Power and Irrigation District. That began operation with the completion of Lake McConaughy in 1941. Although that irrigates only 130,000 acres from the actual surface project, it has provided an area of recharge on 1 million acres of land, the Farwell project and Sargent Frenchman-Cambridge project, and the most recent project, the Ainsworth project, a near prototype of what the O'Neill project will be. Second, we think, is the fact this large area of decline here is the area that is the heart of surface lands that will be irrigated by the O'Neill irrigation project. That area does include approximately 30,000 acres that now does not have access to groundwater. So that will be absolutely new production and sustenance of 40,000 new acres in which groundwaters have declined.

We realize the Federal standards under the principles and standards recognize no value, economic or social, for groundwater recharge. We think the data and changing times that the chairman now presiding over the committee would understand, this information is coming from the O'Gallah High Plains aquifer study. It involves six States. While Nebraska does not have the severity other States do, we do have some problems that can be seen where we have the opportunity to solve these and other substantial groundwater problems.

WATER QUALITY

Mr. Drayton mentioned nitrate. As part of the final EIS prepared by the Water Resources Service, one major point to address in that was groundwater quality. The study shows, for instance, in the Springview service area 2.4 to the O'Neill area of 11 parts per mission—2.4 million grams per liter or parts per million. That is under current conditions. With the project in place, that increases to approximately five to six seventeenths parts per million. Without the project in place, 168 parts per million nitrate concentration.

Senator SCHMITT. Is that fertilizer nitrate?

Mr. ODGAARD. Principally it is nitrate, as far as we know, Senator, coming from fertilizer, yes. One of the principal reasons for it is with the groundwater withdrawals, we have a concentration of the amount of chemical or contamination that is in the water. We know, for instance, in the groundwater quadrant maps in the State of Nebraska now that all of the major, extensive survey water irrigation areas are free of or have no more than half a dozen wells that have nitrate problems because surface water development does dilute the groundwater volumes and thereby spread out that contamination.

PROJECT OPERATIONS

Other things can be said about this project. There is a memorandum of understanding signed off by EPA about operation of the project. We have a 2-week course established at the Institute of Agriculture and Natural Resources at the University of Nebraska. All farmers will take the course. We have courses in irrigation scheduling and fertilizer management techniques. Really, in short, from an environmental health standpoint, this is probably a model project for the entire Nation.

We could answer any other questions, but in the interest of time we will leave the map throughout the hearing and we will be glad to cooperate in any other way.

Senator SCHMITT. Only one question, why hasn't your hair turned gray like everybody else connected with this project?

Mr. ODGAARD. Well, I left and worked back here for 10 years.

Mr. DRAYTON. Next, we have a few words from Shorty Miles.

Mr. MILES. Mr. Chairman, I am a publisher of a newspaper in the proposed irrigation project area. I want to just give you some of my thoughts about the concern of our people in the whole county.

As you know, the High Plains study on the Ogallah aquifer has been made. There has been extensive drawdown in our area. Our irrigators who are pumping from the aquifer, they have in the past few years had to drop their column on their pumps. Every year they are having to cut down on the amount of water. So it is a very definite concern.

The State of Nebraska is working on water legislation, but we, as yet, are not as lucky as New Mexico. They do have some type of controls on groundwater. Right now, as I am sure you know, sir, the environmentalists have been very active against the Norden Dam project. The national environmentalist organizations have spent money, considerable money. We have a group in Nebraska that runs full page ads trying to get people to write letters to the House side committee and Senate committee, and we want to kind of explain to you, or hope you will understand, that this is a national move to kill a very good project and it does not carry the support of our local people.

In 1979, we had reclamation and irrigation elections. The local people supported it, 77 percent for it on the reclamation and 78 percent on the irrigation.

Basically, we just want you to know we do need the project in our area and that it is a viable and honest-to-good project. Thank you, sir.

Senator SCHMITT. Thank you.

Mr. DRAYTON. Next, we have Leonard Schaefer.

Mr. SCHAEFER. Mr. Chairman, I am Leonard Schaefer. I am from Omaha, Nebr. I am secretary of the Building and Construction Trades Council, represented by 12,000 members in the State of Nebraska, approximately of which 25 percent are out of work. I have appeared on behalf of the union several times and thank you for this opportunity.

My statement is brief, but I think concise, when I say that our unemployment in construction is more severe than it has ever been—since I was here last year, probably another 10 percent. People that belong to our organization, boy, do they need work. This project would bring us that work. It would be of great assistance, rather than to have the other Federal assistance. We want to work. We hope your committee in its good wisdom will help the project that has been in the planning stage for the last 25, 30 years. Thank you.

Senator SCHMITT. Thank you, sir.

Mr. DRAYTON. We have one gentleman left, Francis Bejot.

Mr. BEJOT. Thank you. I live at Ainsworth, Nebr. I am a farmer, cattle feeder, and rancher. I draw water out of the Merritt Reservoir that irrigates there at Ainsworth.

I want to thank you for being able to fund projects. Ours is a beautiful project. It has done what it should do. I can't say enough for it. I feel that the O'Neill project should be funded. It it just an exact prototype of our project. I want you to know I will not receive any monetary benefits for this. My children and grandchildren and future generations will benefit from it. Thank you.

Senator SCHMITT. Thank you, sir.

Mr. DRAYTON. I believe that ends our presentation today, and we do appreciate the time that you have allowed us.

I might add one short statement that the increase we have proposed was our own idea. It was not pushed on us. We wanted you to know about it first. The directors of the two districts proposed this and that is the end of it. Nobody else knew. You are the first one. The House heard it this morning. Other than that, you are the only one.

Senator SCHMITT. We appreciate that and it makes it clear your dedication to the project and the people of that area.

Mr. DRAYTON. Actually, to go a little farther, most of the people who came with us today didn't know it.

Senator SCHMITT. Don't hold back on your friends.

Mr. DRAYTON. Thank you.

Senator SCHMITT. Thank you again, and the subcommittee appreciates your testimony, as well as the previous witnesses.

[The statements follow:]

STATEMENT OF ALFRED T. DRAYTON, PRESIDENT, BOARD OF DIRECTORS, NORTH CENTRAL NEBRASKA RECLAMATION DISTRICT AND NIOBRARA BASIN IRRIGATION DISTRICT

I am Alfred T. Drayton of O'Neill, Nebraska, President of the Boards of Directors of both the North Central Nebraska Reclamation District and the Niobrara Basin Irrigation District. These political subdivisions of the State of Nebraska sent us here to respectfully request your continued assistance in appropriating $3,284,000.00 to the O'Neill Unit of Nebraska for fiscal year 1982.

First, may we directors and our constituents say that we greatly appreciate your past support in funding our O'Neill Unit.

In our statement this year we would like to make three mayor points - first; our irrigators willingness to pay more of the O'Neill Unit construction costs; second; the continued deterioration of our ground water conditions; and third; our continued strong local and state support for our development.

In our districts' 1976 contracts with the United States, which our districts' electors approved by about a 4 to 1 vote, it was agreed that we would pay $11.30 per acre per year on the construction cost of our irrigation works. We recognize that the cost of the O'Neill Unit has increased about fifty (50) percent since we signed those repayment contracts. Thus, we are willing to increase our payment by fifty (50) percent, or $5.65 per acre per year to $16.95 per acre per year. This will bring the irrigators pay back during the planned repayment period to $870 per acre or over 21 percent of the estimated irrigation allocation.

The attached Resolutions of both of our districts demonstrate our willingness to negotiate an amended contract with the United States Water and Power Resources Services for the amount indicated above. Today or as soon as possible we will forward these Resolutions to the Service and the Secretary of the Interior, but we wanted you to be the first to know of our willingness to be fair in dealing with rising costs for our development.

To our knowledge in dealing with Federal Reclamation Law, we are the first to step forward to say we irrigators are willing to pay more in an effort to keep up with increasing construction costs.

The second major item concerns our ground water supplies - both quantity and quality.

Attached is a chart updating our areas precipitation and ground water continued declines. (This shows the 1980 data for charts furnished your committee in previous years.) The water table rose during 1978 and 1979 with three years of above normal rainfall. But with 1980 less than average precipitation the ground water dropped 2 to 5 feet in one season's irrigation. Our ground water supplies continue to be less and less.

Two other reports of the last year also confirm our forecastable ground water demise.

A consultant's analysis was made of the future conditions of our five county area without surface water irrigation and with increased research to gain greater crop and livestock productions. That study, as reported in the draft of the Second Supplement to the O'Neill Unit Environmental Impact Statement says that there will be enormous water table declines in Unit area by the turn of the new century.

The same thing is forecast by the Federally funded High Plains Study Council on the Ogallala Aquifer.

The second ground water chart outlines the ground water quality of our area. It is not improving and won't without surface water imports.

The bringing in of good quality Niobrara River water to our area will greatly retard the declining water table and improve the ground water quality of the area.

Pumping energy will also be saved in two ways with the O'Neill Unit surface water in our area. Some lands will take surface water reducing ground water withdrawals and other lands will have less pump lifts because of O'Neill Unit surface water recharging the water table.

Our third major emphasis: Strong based local and stae support is very evident by 200 plus letters, resolutions, statements by local, regional and Nebraska officials, associations, agencies and individuals.

Although herein we have made three significant points for the O'Neill Unit's continued funding, we do not mean to imply lesser roles for other items; such as the total payout of the Units' cost, the enhanced benefits of wildlife and fishing, greater opportunities recreational activities of the area or the incidental flood control benefits of the Project. For instance, 95% of the Project total costs will be returned to the U. S. Treasury with no cost to the U. S. Taxpayers.

Thus, we respectfully ask that you recommend $3,284,000.00 be appropriated to the O'Neill Unit for fiscal year 1982.

And, again we thank you for your kind consideration.

RESOLUTION
AGREEING TO RENEGOTIATE
CONTRACT NO. 14-06-700-8395
FOR REPAYMENT OF O'NEILL UNIT DISTRIBUTION WORKS

WHEREAS, The North Central Nebraska Reclamation District, herein called the Reclamation District, is organized and existing pursuant to the laws of the State of Nebraska; and

WHEREAS, the Reclamation District includes the irrigable lands of the O'Neill Unit, Nebraska, Pick-Sloan Missouri Basin Program and the irrigable lands of the Niobrara Basin Irrigation District; and

WHEREAS, the Niobrara Basin Irrigation District executed Contract No. 14-06-700-8395, the 18th day of May, 1976 with the United States of America to pay the construction costs of the distribution works of the O'Neill Unit based on January 1975 costs; and

WHEREAS, the cost of the O'Neill Unit has increased approximately fifty (50) percent since the Niobrara Basin Irrigation District executed that contract.

NOW, THEREFORE, We, directors of the North Central Nebraska Reclamation District do firmly resolve that the directors of the Niobrara Basin Irrigation District renegotiate Article 4.a. of Contract No. 14-06-700-8395 by increasing to $34,804,000 the amount to be paid the United States of America.

BE IT FURTHER RESOLVED, that this Resolution is NOT intended nor shall any effort be made by any parties to amend Contract No. 14-06-700-8394 between the United States of America and the North Central Nebraska Reclamation District.

Moved to adopt by Robert Young. Seconded by Loui Kliment.

Voting "Yes": Drayton, Evans, Kliment, Roberts, [illegible], Young and Sokie.

Voting "No": None.

Resolution adopted at the regular March 16, 1981 meeting of the directors of the North Central Nebraska Reclamation District.

Alfred T Drayton
President

ATTEST:
(SEAL)

D. E. Evans
Secretary

RESOLUTION
AGREEING TO RENEGOTIATE
CONTRACT NO. 14-06-700-8395
FOR REPAYMENT OF O'NEILL UNIT DISTRIBUTION WORKS

WHEREAS, the Niobrara Basin Irrigation District, herein called the Irrigation District, is organized and exists pursuant to the laws of the State of Nebraska; and

WHEREAS, the Irrigation District includes the irrigable lands of the O'Neill Unit, Nebraska, Pick-Sloan Missouri Basin Program; and

WHEREAS, the Irrigation District executed Contract No. 14-06-700-8395, the 18th day of May, 1976 with the United States of America to pay the construction costs of the distribution works of the O'Neill Unit based on January 1975 costs; and

WHEREAS, the cost of the O'Neill Unit has increased about fifty (50) percent since the Irrigation District executed that contract.

NOW, THEREFORE, we directors of the Niobrara Basin Irrigation District do respectfully request the United States of America that Article 4.a., page 6, Contract No. 14-06-700-8395 be amended to read "$34,804,000".

BE IT FURTHER RESOLVED that this Resolution is not intended nor shall any effort be made by any parties to amend other Articles or other parts of Article 4.a. of Contract No. 14-06-700-8395.

Moved to adopt by Howard Carr. Seconded by Alfred Drayton.

Voting "Yes": Carr and Drayton.

Voting "No": None.

Absent and not voting: Paul Zakrzewski

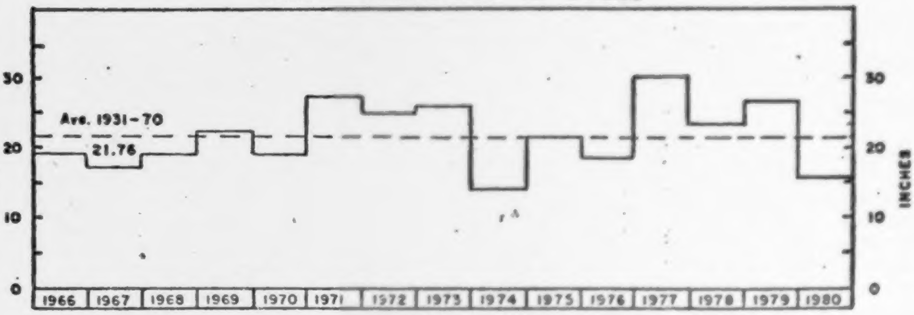
Resolution adopted at the regular March 16, 1981 meeting of the Niobrara Basin Irrigation District.

Alfred T. Drayton
President

ATTEST:
(SEAL)

Paul F. Zakrzewski
Secretary

ANNUAL PRECIPITATION AT O'NEILL



SOURCE: N.O.A.A.

GROUNDWATER LEVELS

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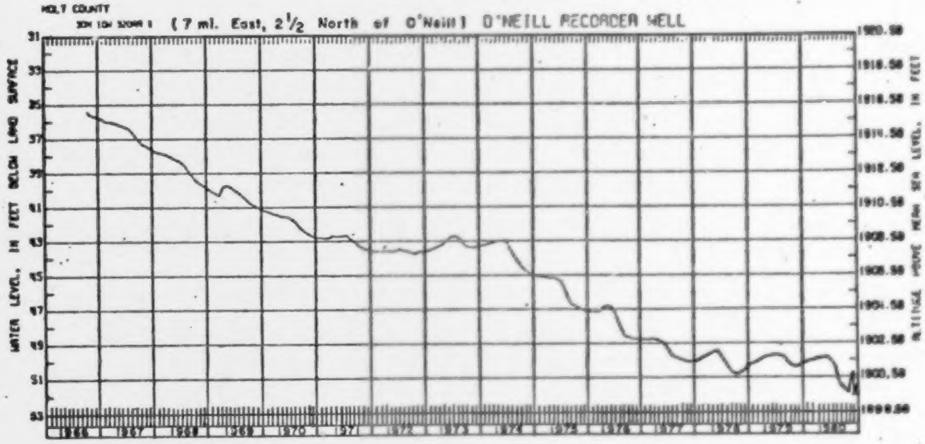
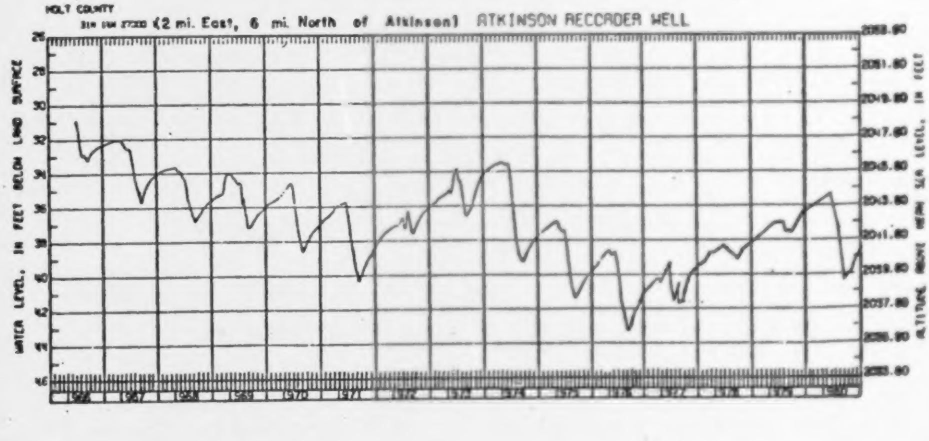




STATEMENT OF JACK ODGAARD, EXECUTIVE VICE PRESIDENT, NEBRASKA WATER RESOURCES ASSOCIATION

Thank you, Mr. Chairman and members of the Committee, for this opportunity for me to appear to testify. On behalf of the 1,500 members of the Nebraska Water Resources Association, I respectfully urge the Committee to approve continued funding for the O'Neill Unit reclamation project in Nebraska.

At a time when so many concerns and problems confront the United States—when federal spending and inflation control are top public and governmental priorities; when environmental concerns are given high priority; when energy consumption, costs, and foreign oil imports are a major concern; when recent and anticipated droughts and water shortages are of national concern; when unemployment continues to plague the nation and put stress on our federal, state, unemployment, and welfare and assistance revenues; when depressed livestock production is given much attention; when the future of U.S. food production is in doubt; when much attention is given to the loss of prime agricultural land to urban sprawl and industrial growth; and when world food needs are of major international concern — we believe the O'Neill reclamation project is much more important than ever.

In times such as this, the Congress, the Executive, and the entire nation should be more aware of those programs and those projects that will best make use of our funds and physical and natural resources to meet our needs, help solve our problems, and address our national concerns. We recommend that federal spending priorities be given to those programs and projects that will generate numerous benefits in addressing the concerns listed above. And we believe that each of those concerns listed above will receive benefits or be addressed in the construction and as a result of the O'Neill project.

Mr. Chairman and members of the Committee, thousands of pages of research, engineering, environmental assessment, and scientific study have been produced on the O'Neill project, and we believe this evidence and material clearly establishes the validity, value, need for, and benefits of the O'Neill project in every aspect, including economic, environmental, food production, energy conservation, and social impacts. We are aware that a highly financed campaign has been underway in the past year to stop the O'Neill project by national environmental organizations that oppose dams for water resources conservation. From the full-color brochures, letters, and other material distributed by those organizations, it is clear that they are not aware of the voluminous research, planning, engineering, design, and other aspects of the project. For the good intentions of many people with bona fide concerns for the environment, we believe, the environmental campaign against the O'Neill project does a disservice.

We trust that the members of this Committee and of the Congress will want to study the evidence, to consider this project on its merits from the volumes of material produced to date, and we trust that you will not be swayed by emotional statements or unsubstantiated claims about the project. In that regard, I will summarize the major features, issues, and benefits involved in the O'Neill project.

I. ECONOMIC IMPACT

According to the most recent revised benefit-cost ratio by the federal government, the O'Neill project will return about $1.50 in direct benefits for every $1.00 invested in it and $1.80 in indirect benefits. Opponents of the project challenge these figures, and we believe that, if anything, they are unrealistically low. I am aware that many members of the Congress have been dissatisfied with the Water Resources Council and the Principles and Standards of that agency for determining economic criteria of water resources projects. For many years we have felt that the federal criteria are unrealistic. For instance, those criteria do not include numerous direct and indirect benefits such as increased local incomes and property values and taxes to support schools, local government, and public services; increased retail trade, business, and jobs, all of which increase local, state, and federal revenues; increased state and federal revenues from higher income taxes; increased agricultural exports and lessening of the U.S. balance-of-trade deficit and trade impact on inflation and the dollar value; and reduced unemployment, welfare, and social assistance.

From the information compiled and maintained by the University of Nebraska Institute of Agriculture and Natural Resources, the impact on Nebraska's economy in 1980 from irrigation of just one quarter-section of land producing 150-bushel-per-acre corn at $3.00 per bushel is $72,000 in gross revenues, $51,000 in retail business, and $14,000 in taxes and government support, including $7,200 in federal income tax, $1,100 in state income tax, $2,000 in local property tax, and $4,000 in sales, excise, fuel, and special taxes. Applying those figures, at the above rate of production and price for corn, we see that the O'Neill reclamation project will have annual economic impacts of $34.6 million in gross crop production, $24.5 million in retail business, and $6.7 million in all tax receipts, for a subtotal of direct economic activity of $65.8 million.

In a study published in 1974 by the Bureau of Business Research at the University of Nebraska entitled "Impact Analysis of Irrigated Agriculture on Nebraska's Economy," Drs. Charles Lamphear and Theodore Roesler concluded that every dollar invested in irrigation agriculture in Nebraska generated eight dollars in economic activity in the state. On that basis it can be concluded that the $330-million current estimated cost of construction of the O'Neill Unit would have a total economic impact of $2.64 billion on Nebraska's economy.

Additional economic impacts that also have social and other impacts include the production of food from irrigated agriculture for U.S. exports. In "The Foreign Policy of Nebraska," an article published last summer in The Washington Quarterly, Professors Steven B. Sample and Eugene P. Trani concluded that the grain and feed produced in Nebraska in 1977 could feed 120 million people. The exports from Nebraska that year totaled nearly $1 billion ($988 million). And that represented economic benefits manyfold, not only to Nebraska but to the nation and all citizens and consumers, by lessening of the U.S. balance-of-trade deficit and dollar erosion.

It is clear from these examples and from the various economic analyses given here and available elsewhere that there is much variance among economists concerning the economic impacts and values of irrigated agriculture. The economic impacts determined in accord with the federal Principles and Standards should be considered the very least of economic impacts, while they do not consider so many other factors that were included in the examples given above. And, at the very least, the Congress should consider that any other independent analyses given and professed by project opponents have no official sanction or validity whatsoever.

II. FOOD PRODUCTION AND FARMLAND

I have already referred to the value of increased food production in the discussion of the economic benefits of an irrigation project. Now we will analyze the O'Neill project in terms of food production and the impact of the project on productive farmland. The principal area to receive water from the O'Neill project —Holt County—in 1979 had the second highest corn production of all counties in Nebraska. The land is excellent and includes Class I, II, and III land. But, in the past decade, that area experienced four droughts during which much dryland farming was a complete failure. Farmers no longer can make a living or survive on 25-bushel-per-acre corn, to say nothing of 3-bushel during last year's drought in some areas. Even if we attribute a dryland average yield of 50 bushels per acre, the difference in crop production from that and the 180 bushels per acre from irrigation will be 10 million bushels per year, from 3.8 million to 13.8 million.

A significant factor in the increased crop production that will occur with the O'Neill project is that it will take place with minimum loss of prime farmland. The total arable land that will be needed for construction of the O'Neill project is less than 7,000 acres, and most of that is not Class I or II or prime farmland.

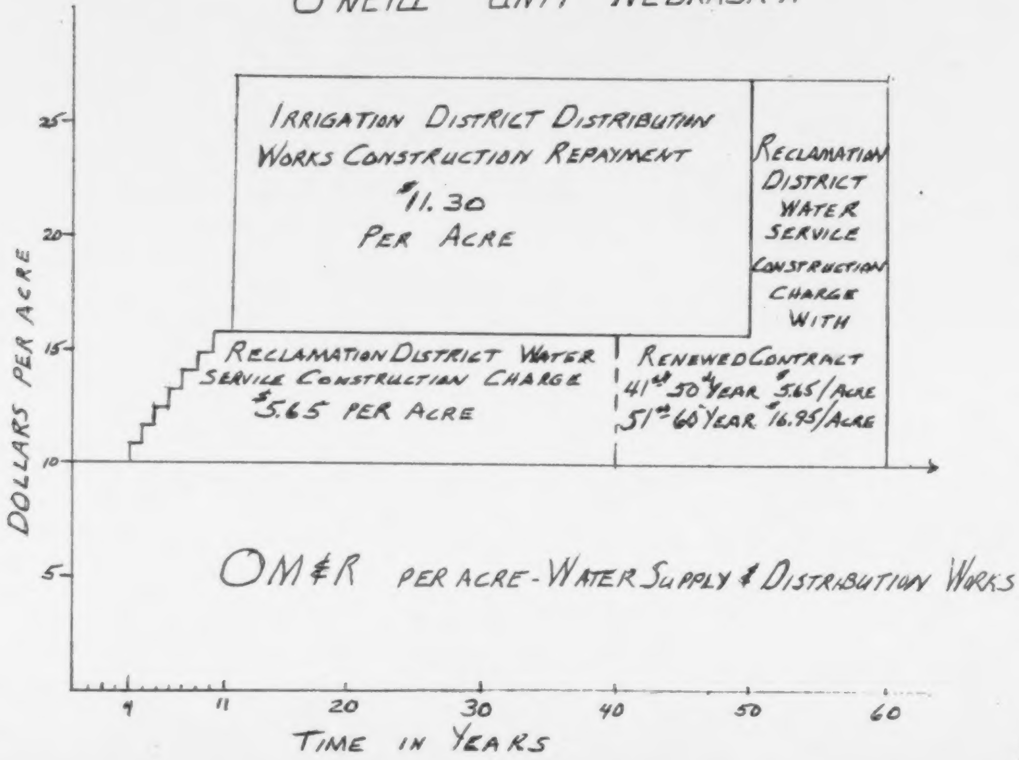
In this regard, I direct the attention of the Congress to a statement made in a colorful brochure published by the National Audubon Society last fall and repeated frequently by environmental organizations that oppose the O'Neill project: "The O'Neill project would take more than 30,000 acres of Nebraska ranch and farmland out of production and off local tax rolls. . . ." The documents, maps, plans, and other factual material are available that show the lands that will be involved in the construction of the O'Neill project. I have already mentioned above that less than 7,000 acres of cropland will be needed for the O'Neill project. What opponents fail to point out or mention is that 22,000 acres of the total 30,000 acres are being acquired for the Norden Dam and Reservoir area for the project and that only 600 acres of cropland are involved. And, of that, there is hardly a contiguous plot of a quarter-section of land with much, if any, land under irrigation. Of the total 22,000 acres for the reservoir take area, the reservoir pool itself will be 6,300 acres, 4,700 acres are being acquired for fish and wildlife management areas, some 900 acres will be used for recreation, including camp sites, marinas, boat ramps, and other recreational areas, and the remaining 10,000 acres will be available for public access for fishing, hunting, camping, and recreation.

The important fact here is that the reservoir will be built in an area of steep canyon walls, cliffs and gullies, and river bottom and brush; and it will not involve the removal of prime farmland for the project.

III. JOBS AND EMPLOYMENT

The construction of the O'Neill project affords an opportunity for long-range employment for a significant number of people. Over the anticipated ten years for construction of the project, there is an average annual employment estimate of 318 persons in the actual construction. The government also estimates an

ANNUAL IRRIGATION WATER CHARGES O'NEILL UNIT NEBRASKA



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average off-site employment of 327 persons due to the project. While these are not large figures by national standards, they are by state standards; and another benefit already alluded to in the discussion of economics is that these jobs can translate into increased wage earners and taxpayers and reduced demands and drains on federal, state, and local taxes and unemployment, welfare, and assistance payments. Other employment benefits can be considered in the stabilization and improvement of the local economies of the project areas and thus greater job stability in the area's retail and business trades.

IV. ENERGY CONSERVATION

Construction of the O'Neill Unit will result in energy conservation and reduced energy needs in the area. Where now more than half of the land in the project area is being irrigated by groundwater pumping and where groundwater levels are declining in the area, the delivery of surface water will eliminate a considerable amount of fuel consumption from deep-well groundwater pumping. But, in addition to the impact on fuel consumption in the project lands served, the project is expected also to have a significant impact in the reduction in energy needs on adjacent lands by recharge of groundwater aquifers and stabilization or raising of groundwater levels.

I realize that the Committee may not be able to reproduce maps in the hearing record, but, for the information of the Committee, I am attaching to this statement the groundwater map of Nebraska that shows changes in groundwater levels across the state. This map is prepared annually from wells monitored by the U.S. Geological Survey and the University of Nebraska's Conservation and Survey Division. Besides the areas in red, which show declines in groundwater levels, the map shows blue areas, which represent rises in groundwater levels. Without exception, the areas of the State of Nebraska where groundwater levels have risen all have had surface water projects developed in the past. And that's the comparison I wish to make here to the O'Neill project.

The largest area of the state shaded in blue is that of the Central Nebraska Public Power and Irrigation District. The project was constructed, starting with the completion of Lake McConaughy in 1941. While is serves only 130,000 acres of farmland with irrigation water, recharge from the project actually has occurred for about one million acres. Prior to development of that project, the typical pumping depth for groundwater irrigation was 180 feet. In the central areas of the recharge area today, groundwater levels have risen as much as 90 feet. Thus, the increases in groundwater levels throughout a much larger area than just that immediate project area have had a beneficial impact in the lessening of fuel needs for pumping.

The soil and land conditions of the O'Neill project area are such that geologists and hydrologists anticipate a similar groundwater recharge impact and benefit from that project. It should be pointed out here that much of the area that will be served by irrigation water from the O'Neill project—Holt County in north-central Nebraska—is the area that is shown on the map to be experiencing considerable declines in groundwater levels.

V. ENVIRONMENT

The environmental impacts of the O'Neill reclamation project not only will be minimal, but, we believe, they will be positive. The planned design of operation of the project, the Norden Reservoir area and fish and wildlife management areas and additional acquisitions should enhance the environment and fish and wildlife of the area. In this regard, the Water and Power Resources Service, working with the sponsoring North Central Nebraska Reclamation District and Niobrara Basin Irrigation District are to be commended for their extraordinary efforts to compromise and give even greater attention than was required to environmental considerations.

At the time of authorization of the O'Neill project in 1972, the operational plans provided for a minimum streamflow bypass at the Norden Dam of 15 cubic feet per second (cfs) and for diversion of much more than the 125,000 acre-feet of water annually now planned. In improving the project operation and design for reducing the actual amount of diversion, the Water and Power Resources Service has increased the absolute minimum streamflow bypass to 67 cfs. It should be pointed out that the planned operation of the project provides for a minimum of streamflow bypass of 100 cfs or better during 98 percent of the time and that only 2 percent of the time will the bypass flows be below that—from 67 cfs to 99 cfs, or an average of 88 cfs.

It should be pointed out also that the average annual flow of the Niobrara River at the O'Neill project dam site is about 500,000 acre-feet, while the river's annual discharge into the Missouri River downstream is 1.1 to 1.2 million acre-feet. Thus, more than half of the river's normal flow originates and occurs normally below the project dam site, in the bottom 120 miles of the 430-mile-long Niobrara River. And, as with other surface water projects in Nebraska, the

O'Neill project is expected to generate increased flows of tributaries and streams below the reservoir from return flows and seepage. The diversion for the irrigation project thus represents only about 12 percent of the total flow of the Niobrara River, and some of that is expected to return to the river.

The storage of the Norden Reservoir will be 411,000 acre-feet, and, with the average streambed decline of 10 to 11 feet per mile, the fluctuation of the reservoir elevation will be 22 feet. The tailwaters will vary about two miles, and the steep canyon walls, cliffs, and sloping hills adjoining the reservoir will be conducive to the fluctuations with minimum environmental and recreational adversities.

While now there are no game fish populations in the mainstem of the river because of its turbidity, Norden Reservoir will provide for substantial fishery habitat. It will be the deepest cold-water lake in Nebraska and will be able to provide for numerous species of game fish, including largemouth bass, white bass, northern and walleye pike, and several species of trout. The project includes development of a trout hatchery, and it also includes acquisition of the tallest waterfall in Nebraska—Smith Falls—which will be protected against future development and impacts.

Among other beneficial impacts of the project for the environment and fish and wildlife will be the 4,700 acres of wildlife management area already mentioned, the 70 miles of reservoir shoreline, much of which will be lined with trees and forest and otherwise ideal for fish spawning, and the reservoir lake surface area of 6,300 acres, which will be beneficial for migrating waterfowl.

Another major environmental impact and benefit of the project has to do with groundwater contamination in the area that it will serve. A study undertaken as part of the environmental impact statement on the project looked at nitrate levels in the groundwater of the lands that will be served by the O'Neill project. Although groundwater recharge is not recognized by federal criteria as a benefit, as already mentioned, the Water and Power Resources Service was directed by federal district court to undertake an extensive study of groundwater conditions as part of the project EIS because of the very real concerns for groundwater quality in recent years. The conclusions of that study are further evidence of the need for and value and benefits of the O'Neill project.

The study found that the present nitrate levels in the Springview area to be served by the project averaged 2.4 milligrams per liter, or 2.4 parts per million (ppm). With the project in place, the study determined, under normal farming procedures, the nitrate levels in that area would reach 15 ppm at the time of equilibrium in the future. But, without the O'Neill project in place, the study concluded, future nitrate levels in the Springview area would reach 34 ppm. The results for the O'Neill-Atkinson area, where the bulk of lands to be served by the project is located, are even more startling in comparison. Average nitrate levels there were found to be 11 ppm. With the project in place, the future levels, under current and normal farming practices, would be expected to reach 18.2 ppm, but, without the project, the nitrate levels in the O'Neill-Atkinson area are projected to reach 163 ppm.

As a result of the groundwater study, a unique effort was undertaken for farm management and operations under the O'Neill reclamation project. The effort resulted in the signing of a memorandum of understanding in February, 1979, between the local sponsoring irrigation and reclamation districts and the Water and Power Resources Service (then Bureau of Reclamation). That MOU was concurred in and approved by the federal Environmental Protection Agency, and it involves a program established by the University of Nebraska's Institute of Agriculture and Natural Resources. Under the program, farmers in the O'Neill project will take a special irrigation scheduling and fertilizer management course designed for the project. The on-farm irrigation operations of the project will utilize the best management and technology, combining the training and education of the special course with the use of irrigation scheduling and fertilizer application management.

Under this program, which we believe is unique in the nation, farmers will be able to implement a program in connection with the O'Neill reclamation project to help stabilize and reverse groundwater pollution and contamination problems from farming sources.

Finally, I point out that the federal district court has accepted the impact and analysis of environmental and fish and wildlife conditions under the environmental impact statement. The two remaining issues that are the subject of the injunction against construction at present and that have been studied and are now being circulated among federal agencies are dam safety and alterations to the project. While these are requirements of the extensive rules and regulations applying to the EIS procedure, it should be pointed out that there no longer are any actual environmental issues affecting the O'Neill project.

Environmentally, we must conclude that the O'Neill project is one of the most outstanding and beneficial projects ever designed.

VI. SOCIAL AND RECREATIONAL

The O'Neill reclamation project will have numerous social impacts and benefits in addition to those involving jobs and employment and tax revenues already discussed under economic impacts. The most significant of these must be the continuation of family farms. At a time when the federal government and numerous social organizations are critical of the decrease in family farms, we think the O'Neill project can be an example of a sound federal program to help ensure continuation and survival of the family farm.

The project sponsors of the O'Neill Unit plan to exercise the requirement in the 1902 Reclamation Act that limits reclamation district lands to 160 acres per person or 320 acres per family farm unit. The number of farms to benefit from the project thus will be 481, based on the total 77,000 acres in the project. But, it should be pointed out, as with other projects in Nebraska, all farm units may not be expected to be the full 160-acre size, so the actual number of persons farming in the project will likely be greater than 480. The Water and Power Resources Service also has determined that there will be 1,490 direct beneficiaries in the project and 4,090 indirect beneficiaries.

The operation of the O'Neill project to ensure family farm units is in stark contrast to some of the land holdings in the area of the Norden Reservoir, which is some 60 miles and more above the principal irrigation lands of the project. Landowners in that general area generally have large holdings. The recent purchase of 54,000 acres along the south side of the Norden Reservoir area and Niobrara River by the Nature Conservancy is indicative of this—the purchase was from only two landowners. One owner with land south and east of the Norden Dam area had 21 sections of land.

Another indication of the social impact of the O'Neill project and the benefits in helping maintain family farms can be seen in the opposition to the project by representatives of a large corporation with absentee ownership of some 6,000 acres in the project area. Under the federal reclamation act, that corporation will be required to dispose of all but 160 acres, or 9,840 acres within ten years of completion of the project.

Two other social impacts of the O'Neill project will be food production, which will help meet world food needs, and curbing of rural outmigration. I have discussed already the world food impact, and the curb of rural outmigration and accompanying elimination of additional urban growth and sprawl should be obvious.

VII. PROJECT DELAYS

Construction of the O'Neill Unit has been delayed as a result of an environmental suit filed against it in 1975 that alleged that the final environmental statement (FES) was inadequate. In March, 1977, the federal district court in Lincoln, Nebraska, issued an injunction against continued construction until four aspects of the 20-plus points of the suit were better addressed. Those were water quality, wildlife, alternatives to project construction, and geology or dam safety. In April, 1979, the court accepted the supplemental material submitted to address the water quality and wildlife issues, and the injunction now applies only to the alternatives and dam safety aspects of the FES. Those issues have been further addressed in supplements that are now being circulated among federal agencies, and it is anticipated that the project will be back in court on those issues late this fall or early this winter, when they should satisfy the court and result in lifting of the injunction.

As part of the geology supplement, the Water and Power Resources Service determined that the dam should be widened for further safety, and that added an estimated $30 million to the estimated cost of construction. But, it should be noted, the principal increase in the cost of the project from the January, 1972, cost of $113 million to the current estimate of $331 million is due to inflation. And it should be noted that the current estimate is based on the 1972 dollar costs adjusted, with only the $30 million in inflated costs for dam widening as new capital commitment to the project.

VIII. PROJECT SUPPORT

The Nebraska Water Resources Association is a private statewide organization of farmers, ranchers, businessmen, and others interested in and working for the wise use, conservation, and development of Nebraska's water resources. We strongly support the O'Neill Unit reclamation project. In addition to our organization, the O'Neill project is supported by the Nebraska Association of Resources Districts, by numerous chambers of commerce across the state, including the larger metropolitan area chambers of commerce outside the project area, among them Omaha, Lincoln, Norfolk, and Columbus.

The project has the support of the two sponsoring entities, the irrigation and reclamation districts, and numerous county boards, city and village councils, and local service clubs and other organizations. The project is supported by the state Natural Resources Commission and state government and by the Missouri River Basin Commission.

Local support for the project was evidenced in 1979 when elections were held on ratification of the irrigation and reclamation contracts for facilities and water service. The first election, on June 1, 1979, resulted in 77 percent approval, and the second election, on December 15, 1979, resulted in 78 percent approval.

IX. ALTERNATIVES

Among various alternatives already considered for the project have been different sites for the dam and reservoir and different ways of obtaining irrigation water. The location of the dam at the present site was determined to be the most feasible and to involve the least area for a reservoir while still allowing for gravity delivery of irrigation water. Alternatives for delivering the same water to the same lands by pumping directly from the Niobrara River are not considered feasible because of the cost, the distances the water would have to be transported and thus pumped, and the elevation from the river bed over the adjacent river canyon walls. The possibility for supplemental or replacement water supplies from off-stream sites or other locations does not exist.

While some 30,000 acres of the project lands to be served cannot now obtain groundwater, there is clearly no alternative for delivery of water for irrigation to those lands other than by surface delivery from the O'Neill project. And, with groundwater levels declining throughout much of the rest of the project lands, the alternative to no project would be eventual reversion to dryland farming. The droughts of recent years are sufficient evidence that the population, social, and economic impacts would be devastating if the O'Neill project would not be built.

X. SUMMARY

The O'Neill project includes only $3.3 million in the budget for fiscal 1982. Elimination of this amount will not be significant in the impact on federal spending or the budget. But elimination of funding could have a drastic effect in delaying or stopping a project that will provide multiple benefits, including substantial economic activity in the private sector, for many years to come.

Reclamation projects such as O'Neill are one of the few of all federal programs that involve some repayment and that generate additional federal, state, and local revenues and economic activities that benefit the nation for years into the future.

When I began my statement, I mentioned the substantial effort by environmental organizations in opposition to the O'Neill project. I mentioned the colorful brochures and extensive pamphlets and materials those groups have produced. And I pointed out the lack of any evidence or factual material in those items and the false claims and emotional statements made by those opponents. I expressed the hope that the members of Congress not be swayed by such emotional things but that you consider the facts, the extensive studies and research, all of which support the O'Neill project, and the desires and wishes of the local people.

In summarizing, I think it will be of interest to the members of the Committee and the Congress to analyze just one item used by project opponents in their emotional and inaccurate campaign against the O'Neill project. That item is the brochure I referred to earlier that was produced by the National Audubon Society. In assessing this pamphlet, we believe, the Congress will be able to determine for itself the truth and honesty of project opponents.

I have already pointed out the false statement on the back of the brochure about 30,000 acres being taken out of production. The cover of the brochure shows three children standing below Smith Falls under the appeal, "Please Help Save the Scenic Niobrara." The implication in that photograph is obvious—that Smith Falls will be destroyed or inundated by the O'Neill project. I've already pointed out that it will not be but, in fact, will be acquired and protected as part of the project.

The cover also shows an aerial view of an area "upstream from the most outstanding stretch," which again implies that the most outstanding stretch will be destroyed or inundated. Probably the most outstanding stretch of the river scenically is the area pictured, which is above the Norden Reservoir area and which will not be affected by the project in any way. Finally, the text of the brochure about the natural treasures and abundant wildlife in the Niobrara valley implies the destruction or loss of those treasures and wildlife. Of course they will not be destroyed or lost.

Although the Committee may not be able to reproduce maps and other materials, I am providing three additional items as attachments for the information of the Committee. These include the groundwater-levels map of Nebraska already discussed, copies of the Norden Reservoir area map showing habitat types with cropland specifically noted, and copies of the cover and back page of the National Audubon Society brochure discussed above.

We commend the Congresswoman from Nebraska's Third Congressional District, Representative Virginia Smith, for her staunch support for the O'Neill project over the years, as well as others of our congressional delegation and state government who have supported the project. We thank the Chairman and members of this Committee, as well as other members of Congress who have supported the project in the past and who recognize the tremendous benefits to the nation and the investment in its future by our federal reclamation project.

Mr. Chairman and members of the Committee, that is how we view the O'Neill project and other federal reclamation projects—as investments in the future of the United States. We urge you to approve continued funding for the O'Neill project so that the project can be completed in the near future and its many benefits may begin to accrue for all Americans. Thank you.

STATEMENT OF FRED ROSE, AINSWORTH, NEBR.

Nebraska, and the nation, desperately need to be able to use some of the water in the Niobrara river for irrigation and recreation, rather than let it flow to the Gulf of Mexico.

All of the "experts" are telling the nation that it may be as little as 40 years before wide areas of the nation will be unable to pump water from the ground for irrigation, because of depletion of groundwaters. Surface irrigation from the streams will not only save irrigated agriculture, but also re-charges that important groundwater supply for agricultural, domestic and industrial use.

There can be no doubts that investments in the O'Neill Unit, like other similar reclamation projects, will repay the federal government many times over for the money invested, through generation of vastly increased incomes in the irrigated areas, and the resultant moneys collected in individual and corporate income taxes.

We respectfully request your support of this important project.

STATEMENT OF JOHN R. REYNOLDS, CHAIRMAN, BOARD OF BROWN COUNTY (NEBR.) COMMISSIONERS

We are in favor of the O'Neill Irrigation Unit. A dam such as this type will stablilize the Niobrara River for a suitable distance, will hold the declining ground waters supply which is so necessary to agriculture, the proposed dam when built will be more accessible to the general public, increase the suitability of wildlife habitat, and in general would make a very enjoyable place to spend a vacation.

STATEMENT OF JACK ODGAARD, EXECUTIVE VICE PRESIDENT, NEBRASKA WATER RESOURCES ASSOCIATION

Mr. Chairman and members of the committee, I appreciate this opportunity to appear on behalf of the 1,500 members of the Nebraska Water Resources Association to present this statement in support of continued funding for construction of the North Loup Division reclamation project in Nebraska. The Nebraska Water Resources Association is the largest statewide private organization representing the many and diverse interests in water use, development, and conservation in Nebraska.

The Nebraska Water Resources Association fully supports the continued funding of the North Loup project, for the earliest possible completion of construction so that the multiple benefits of the project can be realized by the citizens of Nebraska. The North Loup project was authorized as part of the Pick-Sloan program in 1972, and considerable funding has gone into the project in the continuation of engineering design, land acquisition, and initial project construction.

The Nebraska Water Resources Association is pleased to note the tremendous approval for the project given in two elections in 1979 on ratification of reclamation and irrigation district contracts for facilities and water service. The first election, on June 5, 1979, resulted in 65 percent approval; and the second election, on Sept. 11, 1979, resulted in 82 percent approval. The results of those elections should leave no doubt about the strong local support for the North Loup project.

Located in central Nebraska, the North Loup project will provide irrigation water for 53,000 acres of farm land in an area where groundwater declines in recent years have been substantial. I realize that the committee may not be able to reproduce maps, but I have attached a map for the information of the members of the committee, which shows the changes in groundwater levels for the State of Nebraska. This map contains the preliminary information on groundwater levels as of the fall of 1980, with significant rises and declines noted. The map is based on data of the U.S. Geological Survey and the Conservation and Survey Division of the University of Nebraska.

The lands that will be served by the North Loup project include that area identified in Valley County in central Nebraska where declines in groundwater levels of up to 20 feet have occurred. Without exception, the groundwater rises shown for the State of Nebraska have all occurred where surface water projects have been established and are in operation. We believe this to be sufficient evidence that reclamation projects provide groundwater recharge; and we believe the North Loup project in time will reverse the declining groundwater levels in its service area.

I realize the support the project has received from the committee since authorization in 1972. We commend the chairman and members of the committee for this support, and we urge your continuing approval of North Loup project funding for fiscal 1982.

STATEMENT OF MIDDLE NIOBRARA NATURAL RESOURCES DISTRICT

Water plays a crucial role in the daily lives of every person living in this Nation. We, as Directors, charged with the management of the Natural Resources for the benefit of the people, regard the O'Neill Unit (Norden Dam) as one of the essential tools of Resource Management.

To prepare for future world crises, water must be stored at every opportunity for use by future generations as their needs may dictate.

The Nebraska Water Resources Department has determined the unappropriated waters of the Niobrara River ample to provide a dependable supply, and the O'Neill Unit's Water Rights are in proper order.

The Nebraska Natural Resources Commission found the project economically justified, capable of improving and stabilizing the area's economy through increased jobs, agricultural and industrial growth, will assist to stabilize ground water quality and quantity; also would provide a potential for public recreation.

The Environment Impact Assessments and Supplements No. 2 have substantially proved that the Norden Dam can be safely constructed and managed in harmony with other ecological interests, maintaining and even improving upon present aesthetic values.

We respectfully urge the Committee on Appropriations to continue Construction Appropriations in the Fiscal Year 1982 for the O'Neill Unit as an investment in our Nation's future.

STATEMENT OF HOWARD W. OTTOSON, ASSISTANT VICE CHANCELLOR, INSTITUTE OF AGRICULTURE AND NATURAL RESOURCES, UNIVERSITY OF NEBRASKA-LINCOLN

Mr. Alfred Drayton, President of the North Central Reclamation District of O'Neill, Nebraska has indicated that the hearings for the Water and Power Resources Service's O'Neill Unit will be held by your subcommittee in the near future.

The development and wise use of the state's water resources are vital to the economic and social well-being of the people of Nebraska. The proposed project would contribute in several ways. First, the provision of water for irrigation would have a direct impact on the agricultural economy of the area. Second, the recharging of ground water would stabilize the supply of such water for pump irrigation, as well as protecting the ground water from degradation in quality. In addition there would be important recreation benefits from the project.

The University of Nebraska does not have an official position on the project. However, it would appear that the project would contribute significantly to the economy and social well-being of the people of Nebraska. I am sure that your committee will give it serious consideration.

STATEMENT OF STATE SENATOR JOHN DECAMP OF NEBRASKA

I am writing you in support of the O'Neill Unit, Pick-Sloan Missouri Basin Program, to urge continued funding for this important project. The majority of lands to be irrigated by the O'Neill Unit are located in my 40th Legislative District where substantial groundwater declines have occurred in recent years.

The people of the O'Neill project area in 1979 twice voted overwhelmingly in support of the project when they ratified reclamation district and irrigation district contracts. A sizeable number of acres to be served by the project are not now able to obtain water for irrigation, and recent studies indicate that if the O'Neill project is not built, a substantial portion of the area of Holt County may have to revert to dryland farming in the future. The consequences on the economy of a significant rural area of Nebraska would be devastating.

The O'Neill project has been delayed several years by court litigation brought by environmental groups. However, the environmental aspects of the project have been adequately addressed to the satisfaction of the federal court. The only remaining issues on which studies have now been completed are dam safety and alternatives to the project. We anticipate they will be accepted by the court and the injunction against construction will be lifted later this year. Thus we will need the funding included in the Fiscal 1982 budget so that construction can resume early next year.

STATEMENT OF WARREN PATEFIELD, FORMER CHAIRMAN, NEBRASKA NATURAL RESOURCES COMMISSION

WITH US TODAY INSTEAD OF ALVIN NARJES, WHO IS ABSENT DUE TO ILLNESS IN HIS FAMILY, IS WARREN PATEFIELD WHO IS A FORMER CHAIRMAN OF THE NEBRASKA NATURAL RESOURCES COMMISSION. HE WILL SPEAK FOR THE STATE OF NEBRASKA.

THE SECOND SUPPLEMENT TO OUR FINAL IMPACT STATEMENT HAS BEEN ABOUT COMPLETED AND WILL BE DELIVERED TO THE COURT ABOUT JUNE 1ST. IT HAS BEEN REVIEWED BY SPECIAL CONSULTANTS ON BOTH DAM SAFETY AND ALTERNATIVES.

OUR GROUND WATER STILL DECLINES AND WHAT IS LEFT IS BEING

SERIOUSLY POLUTED BY NITRATE. CHARTS ARE ATTACHED SHOWING THE EXTENT OF EACH.

WE HAVE OVER 200 LETTERS AND STATEMENTS ADDRESSED TO YOU THAT WE HAD PLANNED TO ATTACH TO OUR STATEMENT BUT A CHANGE IN THE HEARING DATE DID NOT GIVE US TIME. THEY WILL BE FORWARDED TO YOU AS SOON AS WE GET HOME.

THE LAST AND MOST IMPORTANT OF OUR STATEMENT HAS TO DO WITH TWO RESOLUTIONS THAT ARE ATTACHED. THESE RESOLUTIONS RECOGNIZE THE FACT THAT THE DIRECTORS OF THE NORTH CENTRAL NEBRASKA RECLAMATION DISTRICT AND THE NIOBRARA BASIN IRRIGATION DISTRICT ALL UNDERSTAND HOW SERIOUS THE INFLATION OF THE PAST FEW YEARS HAS BEEN AND ITS EFFECT ON THE CONSTUCTION COST OF OUR O'NEILL UNIT.

THEREFORE, AFTER SEVERAL MONTHS OF GIVING THOUGHTS TO WHAT COULD BE AND SHOULD BE DONE, WE DECIDED TO OFFER AN INCREASE IN THE AMOUNT SHOWN ON OUR REPAYMENT CONTRACTS BY ABOUT 50%. THE INCREASE WOULD BE FROM A FIXED REPAYMENT FIGURE OF $45,245,000 TO $66,997,700, OR AN INCREASE OF $21,752,500. THE ANNUAL PER ACRE CHARGE WOULD CHANGE FROM $11.30 TO $16.95.

WE WOULD BE MOST HAPPY TO ANSWER ANY QUESTIONS YOU MAY HAVE ON ANY PART OF THE O'NEILL UNIT.

Letter From Keith Davis, General Manager, Loup Basin Reclamation District

Honorable Mark Hatfield, Chairman
Committee on Appropriations
The United States Senate
1322 Dirksen Office Building
Washington, D.C. 20510

Dear Mr. Chairman:

I am writing in support of the O'Neill Unit of the Pick Sloan Missouri Basin Program.

I believe the O'Neill Unit to be a good project and it is very badly needed in north east Nebraska.

With all present and future demands for water, we must construct surface water projects to better utilize this natural resource to help reduce future water shortage crises.

I urge your committee to appropriate the $3,284,000 as budgeted in FY 82.

Respectfully yours,

Keith Davis

Keith Davis,
General Manager

Letter From Al Narjes, Chairman, Nebraska Natural Resources Commission

March 20, 1981

The Honorable Mark Hatfield
Chairman, Energy and Water Development
  Subcommittee
Senate Appropriations Committee
1235 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Senator Hatfield:

This is to advise you that the Natural Resources Commission, the Nebraska agency responsible for long-range water planning is in full support of construction of the O'Neill Unit. We feel that capture and use of surface water is an important part of our water management activity.

The demonstrated irrigability of much of the project area and the documented groundwater declines in part of the project area point to a need for integrated surface and ground water use. Surface projects such as this will provide both a more stable economic base and provide potential for future energy savings. In a state so heavily committed to agriculture as Nebraska the benefits of the project are of substantial statewide significance.

We urge continued congressional support of the project.

Sincerely,

Al Narjes
Chairman

Statement of State Senator Maurice A. Kremer of Nebraska

It is my understanding that the Senate and House Appropriations Committees will be holding hearings on FY-82 funding for the O'Neill Unit sometime during the week of March 23. I offer my continued strong support for the funding of this project.

Nebraska's economic future depends so much on its water supply, and especially for the use of irrigation. There are four areas in the state where we will likely run out of underground water as it is being presently used. We have much evidence at hand that the construction of this unit will supply recharge for the aquifer from which the O'Neill area draws its water supply for irrigation. Therefore, the construction of the O'Neill Unit will not only supply supplemental water, but also recharge the underground system.

Thank you for your consideration for this project which is so important to the State of Nebraska.

STATEMENT OF CLYDE BURDICK, PRESIDENT, NIOBRARA RIVER BASIN DEVELOPMENT ASSOCIATION

The membership of the Niobrara River Basis Development Association, an organization formed in 1946, recognizes that increased agricultural production is the key to the problem of providing an adequate food supply for our rapidly increasing population. This can be accomplished by the construction of the O'Neill and other irrigation projects that will store our dwindling water supply in times of high run-off to be used to water the crops during the hot dry summers.

If we build these, well-planned and economically sound projects now, we will improve the economy of, not only, the local area, but that of the Nation. They will improve the balance of trade, provide recreational opportunities and enhance the environment. The local support of the O'Neill Project is evidenced by the overwhelming approval by the voters in recent elections held in accordance with Nebraska Law.

This Association urges your Committee to support continued funding for Fiscal Year 1982 for the O'Neill Project.

LETTER FROM DOUGLAS R. SODERQUIST, HASTINGS, NEBR.

March 13, 1981

Honorable Mark Hatfield, Chairman
Committee on Appropriations
The United States Senate
1322 Dirksen Office Building
Washington, D.C. 20510

Chairman Mark Hatfield:

I am writing this letter to express my support of the O'Neill project in north central Nebraska. As a registered Professional Agricultural Engineer in Nebraska, I am concerned about the future use or non-use of our most valuable resource, water.

Many areas are faced with declining water tables. Although panic may overstate the reduction in some areas, the need for conservation is great in all areas of water use to insure continued development of agricultural production. Projects such as the O'Neill will apply excess surface water to irrigate additional crop acres and at the same time help restore ground water supplies. Water is not an exhaustable resource; it is always water in some form, but the distribution is critical and projects such as this will insure that water is available for future agricultural production in the O'Neill area.

The economic impact of these projects is also a benefit to the local area, the state of Nebraska, and the national government. The cost benefit ratio of the O'Neill project is one of the best if the economic reason is of major concern. This project is not a grant, but an investment that will be repayed by local people, for the benefit of the entire state and nation.

My family farm is just outside of the Tri-County project and we have watched the effects of it with envious eyes for many years. I am in favor of any attempt to better use the water that flows through Nebraska and the O'Neill project is one of the best projects for that purpose at this time.

I would urge your support of this project to insure that American agriculture can continue to be the most efficient supplier of food.

Sincerely,

Douglas R Soderquist

STATEMENT OF ROBERT B. CROSBY, FORMER GOVERNOR OF NEBRASKA

As a former Governor of Nebraska, and earlier a Lt. Governor and Speaker of its Legislature, I strongly support adequate funding for the O'Neill Unit.

An average of about 1.25 million acre feet of water leave Nebraska annually from the Niobrara River. The O'Neill Unit would impound and use about one-tenth of that water for irrigation. The need for conserving water in Nebraska has long been understood. We have practiced it with great success on the Platte River and Republican River and their tributaries. We must follow the same wise policy with the Niobrara River.

The ground water supplies are fast being used up in the area that will be irrigated by the O'Neill Unit. Supplemental surface water must be obtained in order to sustain the agricultural production in that area. Nebraska is a part of the great middle America region that feeds the United States and much of the world. We cannot continue to perform that role without water for our crops.

Please allow a sufficient appropriation to the O'Neill Unit to carry its construction forward without interruption.

STATEMENT OF JAMES AND MARIE LARSON, SPRINGVIEW, NEBR.

As parents of two children and taxpayers from Keya Paha County we still support the continued funding for the O'Neill Project. We feel this is a very worthwhile goal. We live in an agricultural area. I am afraid our ground water level is dropping and we need a way to recharge to stabilize it.

Our population is dropping every year. There is little chance for jobs, financial or industrial growth here. We hope when the O'Neill project is completed, there will be more opportunities for young people to keep them here.

We are also looking forward to the recreational benefits of the O'Neill Project. We feel the benefits will far out-weigh the exaggerated adverse environmental impacts made by the groups who keep fighting the project. We feel these groups are people who are always opposed to change and fight anything that comes along.

RESOLUTION OF NEBRASKA NATURAL RESOURCES COMMISSION

O'NEILL UNIT - NEBRASKA

WHEREAS, the Nebraska Natural Resources Commission is responsible for comprehensive land and water resources planning; and,

WHEREAS, the Commission is currently assigned the lead agency responsibility for the State Water Planning & Review Process; and,

WHEREAS, the O'Neill Unit as part of the Pick-Sloan Missouri River Basin Program has been planned by the Water & Power Resources Service (formerly Bureau of Reclamation) and sponsored by the Niobrara Basin Irrigation District and the North Central Nebraska Reclamation District; and,

WHEREAS, The Commission, in 1967, went on record in support of the O'Neill Unit; and,

WHEREAS, the Commission has, on numerous occasions, testified in support of the authorization and funding of the O'Neill Unit before Committees of the United States Congress; and,

WHEREAS, the O'Neill Unit was authorized by the U.S. Congress in 1972 and has since been funded for construction; and,

WHEREAS, the O'Neill Unit enjoys strong local support as evidenced by the July, 1979, vote to approve the Water Service Contract; and,

WHEREAS, the Commission has been briefed on the present status of the project.

NOW THEREFORE BE IT RESOLVED, that it is the opinion of the Natural Resources Commission that the O'Neill Unit -

1. Was planned and economically justified following the proper procedures as established by agencies of the U.S. Government and on proper legislative authority;

2. Would substantially improve and stabilize the economy of the project area and nearby communities; and,

3. Would Create significant statewide benefits for the State of Nebraska.

BE IT FURTHER RESOLVED, that the Natural Resources Commission reaffirm its support of the O'Neill Unit.

Approved by action of the Commission members on May 23, 1980.

Howard Hardy
Chairman, Natural Resources Commission

ATTEST:

Dayle Williamson
Executive Secretary
Natural Resources Commission

STATEMENT OF DOROTHY MUDLOFF, PRESIDENT, O'NEILL (NEBR.) CHAMBER OF COMMERCE

We, the O'Neill Area Chamber of Commerce, feel that the O'Neill Unit, or Norden Dam Project, is still very feasible and necessary for the continued growth of the O'Neill Area and ask that you vote for continued funding.

The Norden Dam Project is considered necessary for the growth and future subsistence of Northern Nebraska. As you know, agriculture is Nebraska's largest industry and many tax dollars support numerous projects throughout the state. If our agri-community is to be productive in the future, it will take quality water in a quanity necessary to support plant life. The whole world is multiplying quickly in terms of population and it is only a matter of time before a real shortage of food goods will become of great importance.

The project would be stablizing the ground water, resulting in energy savings to lift water to the acres that can be sustained from the ground water source and also providing water availability to irrigable land.

This project would also add a 70 mile shoreline which would provide an outstanding recreational lake.

There is also the potential for increased electrical power. With the concern about conserving energy, the project would offer the potential of another energy source.

This project would also provide flood control benefits for all downstream areas. Several times when the early spring thaws started in the mountains, areas where flooded for a time, thus delaying farmers getting the fields planted.

On behalf of the O'Neill Chamber of Commerce, we want to thank you for your time and hope that you vote for continued funding of the O'Neill Unit.

Letter From D. B. Varner, Chairman, University of Lincoln Foundation

March 13, 1981

The Honorable Mark Hatfield, Chairman
Committee on Appropriations
The United States Senate
1322 Dirksen Office Building
Washington, D.C. 20510

Dear Senator Hatfield:

I am writing to support the project known as the O'Neill Unit for Nebraska.

While I readily admit that I do not know the technical details of the cost benefit analyses, I do know that the conservation and use of our water resources are a vital and economic necessity in Nebraska. Having served as president of the University of Nebraska for seven years - and now for the past four years as Chairman of the Board of the University of Nebraska Foundation, I have developed a keen sense of the importance of the wise utilization and management of water in this state. It seems clear to me that we need to take whatever steps are necessary to maximize the sound and economic use of water - and it has been my opinion that the O'Neill project would serve an extraordinarily useful purpose in advancing the economic well-being of the citizens of this state. Based on what I know, it seems to me this action can be taken and still preserve excellent recreational facilities in that general area.

I hope you will support this important project.

Yours truly,

D. B. Varner

D. B. Varner
Chairman

Statement of C. A. Kappelman, Jr., Chairman, Keya Paha County (Nebr.) Board

In regard again to the Norden Dam project or O'Neill Unit, we are weary and disappointed that government projects and the system fails to work at its best ability.

The County Board will here again give our support to the beneficial project. I believe future agriculture and irrigation is one and the same.

Production, economic well being, growth, population, increase--all depend on the development of our resources.

The people that plan and build for the future are prepared for the future. Our future will be better provided for with the O'Neill Unit.

LETTER FROM CHARLES THONE, GOVERNOR OF NEBRASKA

March 18, 1981

The Honorable Tom Bevill
Energy and Water Development Subcommittee
Committee on Appropriations
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

The purpose of this letter is to strongly endorse the Administration's Fiscal 1982 budget requests for all projects involving Nebraska that are under the jurisdiction of your Subcommittee.

Water is an issue of vital importance to the citizens of Nebraska. The wise use, proper management and conservation of water resources are essential to Nebraska's continued economic prosperity. As such, I would ask that you approve the total amount requested for water projects in Nebraska for Fiscal Year 1982.

Your favorable consideration will be deeply appreciated.

Sincerely,

CHARLES THONE
Governor

STATEMENT OF LEE ORTON, EXECUTIVE DIRECTOR, NEBRASKA ASSOCIATION OF RESOURCES DISTRICTS

The Nebraska Association of Resources Districts wishes to express its support for the O'Neill Unit Irrigation Project of the Pick Sloan Missouri Basin Program.

Memory of the drought conditions, along with currently declining groundwater tables throughout the project area, point out the great need for the project. The project will provide irrigation for 77,000 acres, help recharge groundwater tables, create recreation and fish and wildlife habitat.

Construction work has begun and we request your committee to act favorably on further appropriations, so the construction program will not be delayed.

An average of 8.6 million acre feet of water flow out of Nebraska each year. With all the demands for water and with emphasis upon water conservation, which must include storage of unused supply, we must construct surface water projects to better utilize our most valuable natural resource, and help reduce a future water crisis.

Irrigation is the key to our agricultural economy and the O'Neill Project will help stabilize the area's economy.

STATEMENT OF LEONARD SHAEFER, SECRETARY, NEBRASKA BUILDING AND CONSTRUCTION TRADES COUNCILS

The Nebraska Building and Construction Trades Council represent approximately 12,000 members in the Construction Industry in the State of Nebraska.

We have appeared in behalf of the Norden Dam Project (O'Neill Unit) numerous times. Our unemployment is more severe now than ever before. The people we represent need work, not extended unemployment benefits, food stamps, and other Federal assistance.

This project will not only enhance recreation and provide irrigation for ranching and farming, but will make employment for people who need and want to work. We respectively request that you advance this project which has been in planning for 35 years.

STATEMENT OF WILFORD LEACH, MAYOR, AINSWORTH, NEBR.

Your support of the requested 1982 funding for the O'Neill Unit project here in Nebraska is greatly needed.

In an area such as ours where our economy is based on our agriculture, it is very important that water be available when and where it is needed. With more and more irrigation wells being drilled, a project such as the O'Neill Unit is necessary to help control our ground water level and preserve this natural resource before it's too late. Besides benefitting the farmers and ranchers the O'Neill Unit would create new jobs and new businesses in this region and create an alternate source of energy.

As President Reagan's administration has reviewed and approved the funding for this project, I strongly urge your support.

STATEMENT OF MARJORIE SCHUMACHER, BROWN COUNTY, NEBR.

As a resident of Brown County, Nebraska, I would like to let you know that I am in favor of the Norden Dam and O'Neill Irrigation Project. The support for the project at our local level is high, and I feel that the advantages to our local economy and the nation as well as perserving our natural resource "water" is of great importance to all of us.

The cost benefit ratio of the project is one of the best in the nation for the projects now being considered but continual delays of this project will no doubt increase the cost of the proposed unit. Therefore, I urge you to give your immediated support to this project and do all that you can to help assure the people of north-central Nebraska of your confidence in this project.

Thank you for your consideration.

STATEMENT OF JOHN C. WATSON, PRESIDENT, FIRST NATIONAL BANK, O'NEILL, NEBR.

As we have in the past, we continue to support wholeheartedly the O'Neill Unit and urge your subcommittee to support the 1981 funding request for the O'Neill Unit.

We, in Nebraska, are blessed with an underground and surface water resource, but we need to conserve and use the water flowing out of the state. The O'Neill Unit will use excess river water for irrigation and recreation as well as recharge and stabilize ground-water levels.

We will appreciate any assistance you and your subcommittee can provide for the continued funding of the O'Neill Unit. This project is vitally important to the economy of this area, this state, and to the nation.

LETTER FROM WYNN AND JUDY ROBERTS, O'NEILL, NEBR.

O'NEILL, NEBR., *March 9, 1981.*

Hon. MARK HATFIELD,
Chairman, Committee on Appropriations,
U.S. Senate, Washington, D.C. 20510

SIR: We are a young farm family living within the O'Neill Unit District. We are very much in favor of the O'Neill Unit in a number of ways.

First of all, we are unable to get enough water for irrigating. Therefore, the O'Neill Unit would provide us with the necessary water to raise our own feed.

The O'Neill Unit would also help recharge the groundwater level. This would also prevent a loss of domestic wells.

Also, we feel that the habitation for wildlife would be increased which, in turn, would mean an increase of wildlife. This would allow the sportsman a larger hunting area.

These are only a few of the many, many favorable ways of the O'Neill Unit. So we are asking you for your full support to continue this project until it is completely built.

Thank you.

WYNN ROBERTS.
JUDY ROBERTS.

SUBCOMMITTEE RECESS

Senator SCHMITT. We will recess until 10 a.m. Monday in this room.

[Whereupon, at 4 p.m. Thursday, March 26, the subcommittee was recessed, to reconvene at 10 a.m. Monday, March 30.]

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